The Speakers of Indo-European and Their World

Proceedings of the 17th Fachtagung of the Society for Indo-European Studies
Basel, 9–12 September 2024

Edited by
Sergio Neri and Michiel de Vaan

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The Many Sons of Water: the progeny of PIE **h₂óp-*

Romain Garnier & Philippe Hattat

1. In the beginning was the Water

One of the most fundamental elements of the natural environment is water, which shapes landscapes and climate, as well as the worldview of human populations throughout the ages. We invite the reader to explore some areas of the water-world of the Indo-Europeans, by revisiting the evidence of the PIE root noun **h₂óp-*/**h₂ép-* '(running) water, river', the reflexes of which are manifold and well known. To cite some of them for sake of convenience: Ved. *ā́p* / *áp-* [f.] 'water', Av. *ap-* 'water' (nom.sg. *āfš*), Pers. *āb*, etc. preserving well the original declension; Toch. AB *āp-* [f.] 'water, river, flood'; Osc. **aapa-** 'water';[1] OPr. *ape* [f.] 'river', Lith. *ùpė* [f.] 'stream, river';[2] poss. Arm. **haw-* in *hawaṙi = getaṙ* 'river-bed, river-shore'.[3] It designated the water as an active, animate force, often divinized:[4] the water in movement, full of currents, rapids, swirls, eddies, that can overflow and provoke flooding. By contrast, the PIE root noun **u̯ód-*/**u̯éd-*, was the inanimate water seen as an element, known by derivatives where it behaves like a mass noun: (**u̯éd-or-h₂ >*) **u̯éd-ōr*/**ud-n-* [collective/delibative] '*Gewässer*, body, mass of water' (reflected as a singular in Gk. ὕδωρ, ὕδατος [nt.] 'water', Umbr. *utur* 'water'), in comparison to **u̯ed-ṓr* [nt.pl.] 'instances of water' (Hitt. *u̯idār* count plural of *u̯ādar*),[5] both internal derivatives of the acrostatic stem **u̯ód-r̥*/**u̯éd-n̥-s* [nt.] 'water'. These facts are known things. In the following pages, we will highlight new etymological connexions of **h₂óp-*/**h₂ép-* that we found thanks to the principles of "decasuative" derivation (here delocative) – with possessive or appurtinative semantics –,[6] and prepositional compounds[7] – often with spatial semantics.

2. What is the validity of a parallel etymon **h₂eb$^{(h)}$-*?

Before doing this, we must first clarify the relation of **h₂óp-*/**h₂ép-* with Proto-Anatolian **Hab-* 'river' and other forms that cannot continue **p*.

1 The initial **aa-** remains unexplained.
2 From **h₂ep-i̯e̯h₂*, with the noteworthy and problematic *u-* of East Baltic.
3 Martirosyan (2010: 206).
4 Watkins (1972: 39).
5 Melchert (2011: 396; 398); Nussbaum (2014: 300 and 303 mostly); Pinault (2020: 309) for the place of the stress.
6 See, among others, Nussbaum (1986), Rau (2007), Nikolaev (2009), and Fortson (2020) (which is an overview of the evidence and critics) for a state of the art on this topic.
7 Some formations of this type have already been reconstructed, see *NIL* 312 for an exhaustive list.

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2.1. Evidence for PIE *$h_2eb^{(h)}$-

The forms are the following. In Anatolian, the reflexes unambiguously show a voiced segment:[8] Hitt. *$ḫ$*apa*- [c.] ‘river’; PLuw. *$xáb$-*a/i*- > CLuw. $ḫ$*āpiš* [c.] ‘river’, HLuw. /hab(i)-/ [c.] ‘river’, Car. **kob* [c.] ‘river’;[9] PLuw. collective *xab-$á$-[10] in Car. *Kbo* place-name ‘Keramos’, PLuw. *xab-$á$-*d*- ‘river-valley, irrigated land’ (CLuw. in Hittite transmission $ḫ$*apāta/i*-, HLuw. /habad(i)-/, Lyc. *xbad(i)*-) and the PLuw. denominative (Cluw. in Hittite transmission $ḫ$*āpāi*- ‘to wet (the ground), water, moisten; (with *ar$ḫ$a*) to dry’, Lyc. *xba(i)*-$^{(di)}$ ‘to irrigate’);[11] Lyd. *kofuλ* dat.sg.c. ‘water’;[12] nasal-stem in Pal. *$ḫ$a-a-ap-na-aš* [c.] /xáb.nas/ ‘river’ (metaphorically of blood, about a ram that is killed),[13] and perhaps in the Hittite dat.-loc.sg. ÍD-*ni*. A nasal-stem – the same that the one attested in Palaic or not – is found in PCelt. *$abū$/*$abon$- [f.] ‘river’,[14] Lat. *amnĭs* [m.] ‘river’, PGerm. **apōn* ‘river’,[15] perhaps also Alb. *amë* [f.] (Gheg) ~ *(h)am* [m.] (Central/South Gheg) ‘source, spring, source of a spring, stream bed, etc.’.[16] Furthermore, quite a large amount of new evidence has been gathered for a form *h_2eb^h-:[17] Gk. ἄφαρ [adv.] ‘quickly, suddenly, forthwith’, ἀφρός [m.] ‘foam’, ἄφνω(ς) ‘suddenly’ (ἀφνός· ἐξαίφνης in Hsch.), ἄφενος [nt.] ‘wealth’, PGerm. *$aƀra$- [adj.] ‘strong, violent; much, very’, PCelt. *$abro$- ‘much, very’, and the reflexes of the nasal-stem above.

2.2. Surprisingly close etyma

The debate over the relation of these words to each other and the root-noun *$h_2óp$-/*$h_2ép$- is well known, but there is currently no real consensus. We are among those who do not believe in the necessity of a separate root *$h_2eb^{(h)}$- ‘river’ vis-à-vis of *$h_2óp$-/*$h_2ép$- ‘(running) water, river’. Indeed, it is uneconomical to postulate two different roots with a so stunning formal similarity for such close (if not identical) meanings: it is common fact cross-linguistically that WATER

8 See *eDiAna* 352.

9 Regularly from Proto-Luw. *$xáb(i)$- with *$á$ > Car. *o*, cf. Adiego (2007: 258).

10 Hajnal (1995: 172 fn. 227), Sasseville (2021: 102–3).

11 This is the doctrine of Hajnal (1995: 154; 172 fn. 227), and Sasseville in *eDiAna* 356.

12 Found in the bilingual inscription LW 1.9 (Sardis) in the formula *kλidaλ kofuλ=k* ‘earth and water’ (= Aramaic *ṭyn w-myn* ‘soil and water’).

13 Watkins (1978: 310).

14 OIr. *oub, aub*, gen.sg *abae* ‘river’, and W *afon*, Bret. *aven*, etc. from *$abon$-$ā$; see Stüber (1998: 97–101) for the morphology. For *$abon$- in toponymy, see Delamarre (2003: 29–30), Schaffner (2015: 233–5). A thematic noun in Insular Celtic **abos* was supposedly found, according to Watkins (1973: 80–1), in the derivative *abo-$nā$ ‘river’ and in Ptolemy’s Geography: Ἄβου ποταμοῦ ἐκβολαί designating the estuary of the Humber river, confirming the presence of *$h_2eb^{(h)}$- in Celtic; but McCone (1992: 109) admits that Ἄβου is the expected nominative stem *$abū$ (accepted by Stüber, 1998: 98), which sounded like the genitive of a Greek thematic stem (similarly Schaffner, 2015: 234).

15 This word is only found in German toponomastics: OLG -*apa* in *Alpe* (< *Alapa*), *Wispe* (< *Visapa*), etc., *Ape* river name in the Lower Rhine region; OHG -*affa* in *Askaffa* (today *Aschaff*), *Brūnaffa*, etc. If not from the Old European hydronymy, PGerm. **apōn* is deemed inherited by Neri (2009: 8), a position followed by Schaffner (2020: 159–62).

16 Demiraj (1997: 75–6). It could be mechanically from PAlb. *$abnā$ or *$apnā$ (cp. PIE *sup-*no*- > PAlb. *$źup$-*na*- > Alb. *gjumë* [m.] ‘sleep’ for the phonetics) equally. As often with Albanian etymologies, such a word can go back to other proto-forms, like *$amā$ (as a metaphorical use of ‘mother’, cf. Orel (1998: 4), with literature; not very convincing though) or (and why not?) *$audmā$ (related to the isolated root *h_x*eu̯d*- [?*h_2*eu̯d*-] of Skt. *odatī* [f.] ‘the gushing, bubbling one’, *odman*- [nt.] ‘waves’, Av. *aoδa*- ‘spring, well’).

17 Willi (2004). We believe them – for some at least – semantically founded, and we will come back to these later.

and RIVER can be colexified,[18] and it was probably so at the PIE level for the root-noun **h₂óp-*/**h₂ép-*, as seen by some of its cognates.[19] Both roots are more probably phonetic variants.[20]

2.3. A case of allophony?

If the variation is **p* ~ **bʰ*,[21] it is in no way possible that **p* > **bʰ*, whereas **bʰ* > **p* is conceivable. It could be an instance of devoicing, but the known data does not corroborate this.[22] Thus, **h₂ebʰ-* cannot be upheld, and we will argue next that a majority of the alleged reflexes of **h₂ebʰ-* (cited in 2.1.3. above) can be explained in alternative ways. If the variation was rather **p* ~ **b*, diverse solutions have been provided, all admitting with reason that **h₂eb-* is the secondary form.[23]

---

18 Several examples can be found in the *CLICS*^{3} database: https://clics.clld.org/edges/666-948 (last seen on 13/07/25). For the concept of colexification, see François (2008).

19 The Vedic compound *aptúr-* [adj.] admitted as 'crossing the water over' (*-túr* < PIE root noun **tr̥h₂-*) should be rather translated 'crossing the waters over', because it retains something of this old meaning 'running water, river': it is not simply the water that must be crossed, but waters in motion, currents that are sometimes strong and dangerous, by finding the most fordable passage.

20 One of the two anonymous reviewers suggested to us to integrate a discussion about the thorny problem of **h₂ekʷ-* 'water', found in Lat. *aqua* [f.] 'water', PGerm. *axwō* [f.] 'water, river, waterrun' (Go. *ahva* 'water, body of water', ON *á* 'river', OE *ēa* 'stream, river', OS *aha* 'water, river', Gm. *Ache*, etc.), **a(g)wjō* > **aujō* [f.] 'land in the waters, wetland, floodplain, island' (ON *ey* 'island', OE *īeġ*, *ēġ*, *īġ* 'island; dry land in a marsh', OHG *ouwa* 'island, meadow', etc.), and perhaps some hydronyms. Several solutions have been provided to link this word with **h₂óp-*/**h₂ép-*: improbable phonetic development **-pH-* > **-kʷ-* (Kroonen, 2013: 7), not well-motivated tabuistic distortion of **h₂ep-* (Watkins, 1972: 40), lexical contamination in the collocation **h₂ep- tekʷ-* 'water flows' (Neri, 2017: 327 fn. 195). The last one is more credible, but alas speculative because the reconstruction of the root **tekʷ-* 'to run, flow' is uncertain: it could be **tek-*, as illustrated by Pal. *tēkanz(a)* [part.nom.sg.c.] 'flowing', not †*tēkwanz(a)*, cf. Watkins (1978: 311), and Sasseville in *eDiAna* 1117. There is no way to find the factor for the delabialization **tekʷ-* → **tek-*: there is no form **tékʷ-u-* or **tekʷ-u̯ó-* (= Ved. *táku-* or *takvá-* 'quick, swift') in the Anatolian data. Toch. B *cake* [m.] 'river' is no proof of **tek-* rather than **tekʷ-*, because the rounding of the labiovelars has been lost in certain (not always clear though) conditions in Common Tocharian; see Kim (1999), Pinault (2008: 424–6). A very different hypothesis was formulated by Garnier (2012a), who reconstructs an animate **h₂ék̂-u̯-eh₂* 'vivid water', substantivization of the adjective **h₂ék̂-u-* 'sharp, pointed' and 'quick, swift' (for the colexification of sharp and fast, cp. Gk. ὀξύς 'sharp' and 'quick, swift'; see also Pinault, 2023). A substrate origin (as claimed by Beekes, 1998 or de Vaan, 2008: 48) is unnecessary.

21 This is Watkins' opinion (1973: 81): "if there did exist […] a relation between **ap-* 'water' […] and **ab-* or **abh-* 'river' –which is by no means sure– it is perhaps easier to account for an alternation **p*/*bh* than **p*/*b*".

22 Some facts against a devoicing **h₂ebʰ-* > **h₂ep-*: (i) the contexts of devoicing are not numerous enough among the known forms of **h₂óp-*/**h₂ép-* (only forms with **-s* in the root noun paradigm); (ii) Indo-Iranian would have escaped somehow the effect of devoicing (because of Bartholomae's law) in the forms with **-s* in the root noun paradigm – unless the devoicing is of Proto-Indo-European date –; (iii) a root **h₂ebʰ-* prevents PGerm. **apōn* 'river' from being an inherited word; (iv) the attested prepositional compounds and those we will propose later (see section 6. below) are all made on **h₂ep-* and there is no trace of them with **h₂ebʰ-*.

23 Some believe that there was a parallel root **h₂eb-* (**ab-*) distinct from **h₂ep-*, as Cowgill & Mayrhofer (1986: 144) or Schrijver (2004: 508). In case of an allophony, the hypothesis **b* → **p* is fruitless, anyway. If one assumes that the original form was **h₂eb-*, later devoiced to **h₂ep-*, it has the only advantage of a more direct explanation of Anatolian **Hab-* (as Anatolian was the first to branch off from the Indo-European linguistic community, it would be an archaic form) and the nasal-stem **h₂eb-on-*. PToch. **āp* 'water, river, flood', phonetically ambiguous, can reflect both **h₂ep-* and **h₂eb-*. A root **h₂eb-* is however very problematic, as the conditions for devoicing **b* > **p* would be more or less the same that with the disproven variant **h₂ebʰ-* (without the problem of Bartholomae's law in Indo-Iranian, as PIE **h₂ób-s* would have yielded PIIr.

2.3.1. Voicing-assimilation?

A first hypothesis[24] assumes the influence of the so-called *pada*-endings in the flexion of the root-noun, with voicing-assimilation *h_2ep-b^h° > *h_2eb-b^h°; the individualizing-suffix *-*on*-/*-*n*- was then added to the allomorph *h_2eb-. However, these endings do not exist in Anatolian (an early loss is possible but cannot be demonstrated), and their ancientness is not even sure for PIE.[25]

2.3.2. Voicing in absolute final position?

A second theory[26] admits that the endingless locative of the root noun had a final voiced segment *$h_2áb$ – according to the well known tendency of some of the oldest Indo-European languages (and perhaps of PIE itself) for voicing an unvoiced plosive in this position – and that this allomorph was analogically extended to some other forms like the allative *$h_2(e)b$-eh_2 'towards water' or the nasal-stem *h_2eb-*on*-. This is possible, but it would have been welcome if other root nouns had exhibited such voiced/unvoiced doublets – for example, *$\underline{\mu}ók^u$-/*$\underline{\mu}ék^u$- 'voice, speech' → †$\underline{\mu}ég^u$-. Even though there was analogical restitution of the unvoiced form in this position, why did this not apply to all the root-nouns? Thus why only *$h_2óp$-/*$h_2ép$- would have preserved this conditioned voicing?

2.3.3. Hoffmann-suffix?

A third solution, much controversial, is a form containing the "Hoffmann-suffix" *h_2ep-$h_3ón$-/*h_2ep-h_3n-,[27] in which the third laryngeal triggered the "voicing" of the preceding stop *-ph_3- > *-*b*- as in *pi-ph_3-*e/o*- 'to gulp, drink' > Ved. *píbati*, OIr. *ibid*, etc. This solution explains elegantly most of the data, but this reconstruction is not fully accepted nowadays: it is sometimes doubted[28] or not cited[29] (thus implicitly rejected) for several reasons.[30] Admittedly, there are some difficulties with this Hoffmann-formation and with this suffix in general.

2.3.3.a. A first problem is the formal reconstruction of the suffix. In short, there are two main theories: (i) *-h_3*on*-/*-h_3*n*-, which is generally viewed as an unanalysable suffix or, sometimes, as the grammaticalization of a second member of compound;[31] (ii) *h_1*on*-/*h_1*n*-, which has been accounted for by a deinstrumental possessive derivative *h_1-*on*-/*h_1-*n*- with the individu-

Háp-s), and it has the obvious drawback to contain the phoneme **b* that is so scarcely attested that it could not exist at all. Therefore, this solution is to be rejected.

24 Schaffner (2015: 246); Schaffner & Steer in *eDiAna* 352.

25 These doubts are already expressed by Oettinger *apud* Schaffner (2020: 156 fn. 32). Remember that in Vedic, the *Padapāṭha* separates the endings *-bhiḥ*, *-bhyaḥ* as if they were still adverbs (and they often bear the accent).

26 Neri (2017: 326–7 fn. 195).

27 Hamp (1972). This etymology is accepted, for example, by Stüber (1998: 97–101), Matasović (2009: 23–4), Schaffner (2015; 2020) etc.

28 Watkins (1973); Willi (2004: 331 fn. 9).

29 Kloekhorst (2008: 294–5); de Vaan (2008: 39).

30 The preceding attempts at explanation (in 2.3.1. and 2.3.2.) exist partly because of the rejection of Hamp's hypothesis.

31 Two theories are found in literature: (i) *h_3en- 'benefit', from an *aniṭ*-variant of the root *h_3neh_2- (of Gk. ὀνίνημι 'to benefit, help') according to Pinault (2000: 61–2); (ii) *h_3enh_2- 'load' (of Lat. *onus, -eris* 'load, charge, burden; responsibility, task, charge', Ved. *ánas*- 'cart; offspring (Lex.)', Gk. ὄνος 'donkey') according to Dunkel (2001: 12) and Olsen (2010: 187–90). These two attempts fail to convince semantically.

alizing suffix.[32] Since the previous hypotheses for the variant with **-b-* (see 3.1. and 3.2.) have been rejected, only Hamp's solution deserves serious attention, as **-h₃on-* explains directly the "voicing" of **p* to **b*, while **-h₁on-* has no similar effect at all.[33] This does not mean that the deinstrumental theory is wrong, as it is morphologically and semantically plausible for a certain number of words. Since **-h₁-on-*/**-h₁-n-* does not explain some possible instances of voicing, perhaps both suffixes existed side by side and influenced each other in declension and semantics, but this is out of topic.[34]

2.3.3.b. A second problem concerns the semantics of the compound itself: the root noun **h₂óp-*/**h₂ép-* and the possessive **h₂ep-h₃on-* can both mean 'river', a fact which darkens the meaning of the suffix and calls into question its usefulness.[35] The simpler solution lies in the wrong glossing of some steps in the derivations: as 'river' cannot just be 'possessing water', something obvious for all waterbodies, **h₂óp-*/**h₂ép-* should not be glossed by 'water' (in a "Sanskritocentric" way) but necessarily by 'stream, current, agitated mass of water'. The possessive meant therefore 'having streams / currents / vivid water' → 'river, watercourse'.[36] The fact that the root noun can also mean 'river' is due, in all probability, to the frequent colexification of STREAM and RIVER, as in Gm. *Strom* [m.] 'stream, current' and 'large river', ON *straumr* [m.] 'stream, current, river', etc. As 'river' seems to be a secondary development from 'stream', this means that 'water' is secondary as well: there is a semantic directionality STREAM → RIVER → WATER in the colexification process. In fact, the meaning 'water' can appear from every word for a waterbody because, as stated by Nussbaum, "the pragmatic circumstances under which a mass noun and its own delibative would be interchangeable are, after all, very easy to imagine: *There's a body of water nearby*. = *There's water nearby*";[37] conversely, a common fact cross-linguistically fact is that the "allative" of 'water' refers to the nearest major waterbody, like a river, a lake, the sea, etc., cp. Fr. *se jeter à l'eau* in its literal meaning.

2.3.3.c. A third problem is that some forms would be rather poorly explained by Hoffmann-formation without the intervention of ancillary hypotheses because of **-h₃-* itself. The resolution of this problem depends largely on the fate of **-h₃-* in Indo-European and on possible internal developments within each language family.

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32 Nussbaum (1998); Fortson (2020: 70 fn. 82).

33 Kümmel (2012: 305) admits that, in these cases of voicing – or rather non-explosion, as he proposes –, "the restriction to **h₃* might be accidental", but this hypothesis is unreliable because no examples of voicing are given for the other laryngeals; if the "Hoffmann-suffix" was **-h₁-on-*/**h₁-n-*, it would be necessary to prove that **h₁* also triggers (what looks like) voicing, but there is no proof of that, as far as we know.

34 Both suffixes are declined **-h₁-on-*/**-h₁-n-* and **-h₃on-*/**-h₃n-*, which is also the pattern of the individualizing suffix **-on-*/**-n-*. Would this mean then that the suffix **-h₃on-* is inherently parseable as **-h₃-on-*/**-h₃-n-*? There is no such suffix **-h₃-*, unless one accepts Pinault's view (2019) of a residual morpheme **-(e)h₃-* with a possessive value. In this case, it could be suggested that **-h₁-on-*/**-h₁-n-* and **-h₃-on-*/**h₃-n-* were formed on the same derivational pattern, and generally overlapped in the daughter languages because of their form and their meaning; the semantic difference was probably tenuous: 'the one with X' > 'the one having X' vs. 'the one possessing X'. This remains of course very speculative, but we hope that further research will provide new insights on this topic.

35 It is therefore understandable why opponents of the Hoffmann-formation prefer to reconstruct – among other possibilities – an individualizing stem **h₂éb-on-*.

36 Pal. *ḫa-a-ap-na-aš* could indicate (on a semantic point of view) that, far from necessarily being a metaphorical use of 'river', it could be still translated as 'stream, flow': the blood of a slaughtered animal (by slitting its throat) pours into spurting flows, not necessarily as a flow that is so abundant it is compared to a river.

37 Nussbaum (2014: 294). For example, 'lake' is a mass noun, and an underlying delibative use can explain how PGerm. **lagu-* 'lake' (< PIE **lók-u-*) evolved into ON *lǫg* 'sea' and 'water'.

2.3.3.c.1. The paradigm of PCelt. **abū* is unique, as has long been noted. The timbre **e* of the weak forms contradicts a Hoffmann-formation, but it seems nevertheless accepted that this paradigm does not represent a paradigm free from any restructuring, either from Proto-Celtic or Pre-Irish.[38] The **-en-* forms are probably not old. The question is what would have been the phonetic outcome of the Indo-European amphikinetic paradigm **h₂ep-h₃on-*. From what is known of the history of *n*-stems in Proto-Celtic, the ancient Indo-European amphikinetic stems experienced an analogical extension of the strong form **-on-* to all the weak forms originally in **-(e)n-*: gen.sg. **-n-és* > **-on-os*, dat.sg. **-n-éi̯* > **-on-ē*, loc.sg. **-én-(i)* > **-on-i*, acc.pl. **-n-m̥̀s* > **-on-ās*, gen.pl. **-n-ŏm* > **-on-om*, dat.pl. **-n̥-bʰ(i̯)ós* > **-on-bos*, instr.pl. **-n̥-bʰís* > **-on-bis*.[39] This has an implication for the noun **h₂ep-h₃on-*: if its outcome in Pre-Proto-Celtic had been **ab-ū*, **ab-on-am*, **ab-n-es*, **ab-n-ē*, **ab-n-i* without vocalization of the laryngeal, there would have been the so-called paradigm restructuring, hence PCelt. nom.sg. **ab-ū*, acc.sg. **ab-on-am*, gen.sg. **ab-on-os*, dat.sg. **ab-on-ē*, loc.sg. **ab-on-i*, etc. Since this did not happen, logic would dictate that the original paradigm of the river name would have been different. From a strictly phonetic point of view, a laryngeal between two consonants, the second of which is a sonorant, and not placed in the onset of an initial syllable, is reflected by a vowel in Proto-Celtic: **-CHR-* > **-CaR-*.[40] This could indicate that the original paradigm was nom.sg. **abū*, acc.sg. **abonam*, gen.sg. **abanos*, dat.sg. **ab-an-ē*, loc.sg. **ab-an-i*, nom.pl. **ab-on-es*, acc.pl. **ab-on-ās*, gen.pl. **ab-an-om*, dat.pl. **ab-an-bos*, instr.pl. **ab-an-bis*. In fact, it had an extremely singular inflection, which must have caused the need to regularize it. In Gaulish and Brittonic a feminine noun **abonā* was back-formed, on the *Scharnierform* of the acc.sg. PCelt. **ab-on-ăm* (whose **-am* is both PIE **-m̥* and PIE **-eh₂-m* > PCelt. **-ām* > **-ăm*).[41] As for the facts of Old Irish, these give the impression that it is not a single paradigm but several, as many attempts at refashioning. The plural forms gen. **ab-an-om*, dat. **ab-an-bos*, instr. **ab-an-bis*, serving as *Scharnierformen* with the neuter *n*-stems of the type nom.-acc.sg. **-an*, gen.sg. **-en-s* > **-ēs*, dat.sg. **-en-ē*, loc.sg. **-en-i*, nom.-acc.pl. **-an-ā*, gen.pl. **-an-om*, dat.pl. **-an-bos*, instr.pl. **-an-bis*,[42] would have first changed the vowel of the weak cases in the singular as well as that of the accusative plural to adopt the previous paradigm, i.e. gen.sg. **ab-ēs* (> OIr. *abae*), dat.sg. **ab-en-ē*, etc., acc.pl. **ab-an-ā* [nt.] → **ab-an-ās* [f.] (adaptation to the basic gender of **abū*). A secondary change, typical of Irish, is that the **-an-* forms of the plural of the neuter *n*-stems are replaced by **-en-*, hence acc.pl. **ab-en-ās* (> OIr. *aibne*), dat.pl. **ab-en-obis* (> OIr. *aibnib*); the expected genitive plural is *abann* < **ab-en-om*, but the attested form *aibne* is analogical.[43] In any case, the nom.sg./pl. and acc.sg. in Old Irish have retained the original inflection. The forms in **-an-* survived long enough for the derivative PCelt. **abanko-* [m.] ‘that which has to do with the river or water’, known by OIr. *abac* [*o* m.] ‘dwarflike creature associated with water’, W *afanc* ‘beaver, dwarf’, Bret. *avank* ‘beaver, dwarf, sea monster’, to be created. It can be traced back either to **ab-an-ko-* with a velar suffix, or at most to **aban-anko-* with haplology. The word existed in Continental Celtic, as shown by the numerous occurrences in the languages of France in Franche-Comté or in the Franco-Provençal zone, where it specialized in ‘willow’

38 The solution proposed by McCone (1992: 105–6) seems too complex to be acceptable, as already emphasized by Schrijver (2004: 508 fn. 5). Schrijver’s own scenario (2004: 508) of a composite paradigm of two internally related forms has as its premise the existence of a different root **ab* which we have rejected.

39 Stüber (1998: 11; 18); Schaffner (2015: 227).

40 As *per* Zair (2012: 199–200; 266).

41 Schaffner (2015: 233; 243).

42 Stüber (1998: 21; 24).

43 Stüber (1998: 98).

and 'wicker', trees found on river banks;[44] note also Galic. *abanqueiro* [m.] 'waterfall, caída de auga desde certa altura causada por un brusco desnivel do terreo'. Besides **abanko-* 'willow' and 'wicker', we also find **abinko-* (< **abenko-*?), attested in Occitan as far as Rouergue (OOcc. *avenc* 'precipice', Barcelonette *aven* 'spring', Nice *aven* 'hole in the ground where water is lost', Rouergue *obenc* 'cave') and in a Franco-Provençal form (Bas Dauph. *aven* 'low-lying land often submerged by river water; alluvial ground planted with wicker'); according to Schrijver,[45] **abinko-* may reflect **abanko-*, but the difference in semantic specialization as well as the presence of the two forms in the Franco-Provençal area could argue in favour of the existence of two distinct words; otherwise there could be semantic and formal influence of the family of **barranko-* (Sp. *barranco* 'anfractuosity, tortuous path', Prt. *barranco* 'dirt cliff at the edge of a river or a road; gully, trench, ravine', Lang. *barranc* 'fox's den; ravine; uncultivated and deserted land') and **barre/inko-* (Prov., Lang. *barenc* 'natural well in limestone terrain; precipice' ~ *barrenc* 'ravine, precipice, chasm; dried-out marshland, bog; small lake'), formed by adding the suffix **-ko-* on the *membra disiecta* of an alternating noun Early PCelt. nom.sg. **bars-ēs*, loc.sg. **bars-en-i*, instr.pl. **bars-an-bis* 'crevice, cavity, hole, ravine, precipice' (Late PCelt. **barr-ēs*, loc.sg. **barr-en-i*, instr.pl. **barr-an-bis*).[46]

2.3.3.c.2. Lat. *amnĭs* does not come from a PIt. *i*-stem **ab-n-i-*, as the archaic ablative *amnĕ* proves; several scholars have thus determined that it was an old PIt. *n*-stem **abō*, **abnes* > Lat. **abō*, *amnĭs* with elimination of the allomorphy and assignment to the *i*-stems.[47] The simplest interpretation of this would be to admit, in this situation, the loss of **-h₃-* in all or part of the paradigm after its effects on adjacent sounds had occurred. This loss of **-h₃-* is in fact not necessary, because even if it had been preserved and vocalized in the weak form of the paradigm, the syncopation effects specific to Latin, due to the Rhythmic Limitation Rules,[48] would have distorted the basic paradigm: Lat. **ab-ō*, **ab-ĭn-ĭs*, pl. **ab-ĭn-ēs*, **ab-ĭn-ĭbŭs* would have been syncopated into **abō*, gen.pl. **amnĭbŭs* and restructured almost completely into a *i*-stem *amnĭs*. This is the development known by *fīnĭs*, *-ĭs* 'end, limit', which is from **fĭu-ō*, **fĭu-ĭn-ĭs*, pl. **fĭu-ĭn-ēs*, **fĭu-ĭn-ĭbŭs* syncopated as *fīnēs*, gen.pl. *fīnĭbŭs* and reanalysed as a *i*-stem (despite an ablative *fīnĕ*, or the form FINEM in *CIL* I² 5 [4th–3rd cent. BCE]) built on the verb *fĭuō* 'to fasten, fix, drive in (stake)'.[49] Therefore, Latin cannot be used alone to determine the probability of retention or loss of **-h₃-* in the paradigm of this word. Comparing with the Celtic data, in which – if our interpretation is correct – **-h₃-* is preserved in the weak forms, it could be so in Italic and Italo-Celtic.

2.3.3.c.3. There is at least one fact on which most scholars agree in the Anatolian data: that the Palaite *ḫa-a-ap-na-aš* /xáb.nas/ originates from a PAnat. thematic form **Háb-no-* backformed on the gen.sg. **Háb-n-os* of the *n*-stem **Hab-on-*.[50] The form **Háb-n-os* show that the laryngeal was lost at a certain stage (before or) in Proto-Anatolian, contrary to what seems found in (Italo-)Celtic as seen above; this is not the place to find the phonetic reasons of this discrepancy. Opinions then diverge to clearly explain the other formations attested in Hittite and the Luwic languages, most of which lack *-n-*. The currently accepted analysis (in *eDiAna*) is that Proto-Anatolian had a stem **Hab-on-* as well as an old root noun **Hab-*, which easily explains

44 For the complete list, see *FEW* XXIV, 2, 33.
45 Schrijver (2004: 507 fn. 2).
46 Garnier (2020: 209).
47 Cf. Watkins (1973: 81); McCone (1992: 102); Stüber (1998: 99); etc.
48 See Garnier (2012b).
49 Garnier (2016: 373).
50 McCone (1992: 109); Stüber (1998: 99); Schaffner (2015: 242).

the many formations without *-n-*. In this analysis, the *n*-stem **Hab-on-* may be the outcome of PIE **h₂ep-h₃on-* or may be a productive derivative on the root noun. Hittite *ḫapa-* would be the secondarily thematized reflection of the root noun **Hab-*,[51] while Luwic **xab-a/i-* may come from an *a*-stem with *i*-mutation or from a stem consonant with *i*-mutation[52] on the root noun. This theory is entirely admissible, as long as we reject the existence of a different root **h₂eb⁽ʰ⁾-*, as argued previously. One solution would be quite natural: Proto-Anatolian would have inherited the PIE root name **h₂óp-/*h₂ép-* > **Hap-*, as well as the possessive derivative **h₂ep-h₃on-* > **Hab-on-*, the former having then been modified by an inner-Anatolian phonetic alignment on the second: **Hap-* vs. **Hab-on-* → **Hab-* vs. **Hab-on-*.[53] This development would have been facilitated both by the frequency of use that the *n*-stem must have had (or the simple productivity of this grammatical category), and by a semantic non-distinction between **Hap-* and **Hab-on-*: they both meant ‘river’, supporting the idea previously put forward (see 2.2. then 2.3.3.c.2.) that PIE **h₂óp-/*h₂ép-* banally colexified ‘current, flow’ and ‘river’, while **h₂ep-h₃on-* designated the entity ‘possessing currents, flows’, i.e. ‘river’. That said, it had also been proposed that Hittite **ḫapaš* stood for PAnat. **Hab-ō + -s*, a form reanalyzed as a thematic word, which led to the refashioning of the original paradigm,[54] clearly visible for example in gen.sg. *ḫa-pa-aš* or in dat.-loc.sg. [Í]D-*pí* (KUB 36.49 i 11 (OS)), with the notable exception, perhaps, of a dat.-loc.sg. form ÍD-*ni*.[55] The Anatolian name for the eagle has long been suggested as a parallel: the PIE nominative singular **h₃ér-ōⁿ* > PAnat. **Hór-ō* has also been recharacterized as **Hórō + -s*, hence Hitt. nom.sg. *ḫāraš*, acc.sg. *ḫāranan*, gen.pl. *ḫāranaš*.[56] Recent forms of accusative singular *ḫāran* (also *ḫaran*, *ḫarān*) are derived from the reanalysis of the nominative *ḫāraš*, although a haplology of the form *ḫāranan*, favoured by the nominative *ḫāraš*, is not an incompatible solution. The same thing may have happened for **ḫapaš*, whose accusative ÍD-*an* acc.sg. could denote **ḫapan* or **ḫapanan* with haplology. The number of occurrences of this word written by the Sumerogram ÍD far exceeding that of the phonetic forms, nothing can ensure that ÍD represents **ḫapa-* rather than **ḫapan-* in a large number of cases; ÍD is sometimes used without any phonetic sign specifying the expected case form. However, the hypothesis of the refection into a thematic word now seems to be rejected,[57] partly because of the productivity of *n*-stems in Anatolian. Luwic **xab-a/i-* does not agree with this analysis, in fact, as long as one seeks to project it to Proto-Anatolian. An alternative to the previous theory can be posited, without the two being incompatible. Proto-Anatolian had inherited only the PIE possessive **h₂ep-h₃on-*, as well as an old PIE allative **h₂(e)p-éh₂* ‘towards the river’ of the root noun **h₂óp-/*h₂ép-*; this is generally an archaic formation, and what is more important for a geographical word, it is therefore certainly inherited. In Hittite, a double analogy has operated: first the allative would have been phonetically remade **ḫappā → ḫa-pa-a* /xa.bǎ/ ‘to the river’ according to the frequent form **Habon-*, then the joint action of **Habō + -s → *ḫapaš* and the integration of *ḫa-pa-a* in its paradigm would have favoured the transformation (perhaps partial) of the inflection of **ḫapaš*. Luwic **xab-a/i-* ‘river’ may be a back-formation of an unattested

51 Rieken (1999: 19).

52 Simon in *eDiAna* 352.

53 This has already been proposed by Oettinger *apud* Schaffner (2020: 156 fn. 32).

54 Stüber (1998: 99; 100); Schaffner (2015: 242); Schaffner & Steer in *eDiAna* 352.

55 Hitt. ÍD-*ni* (KUB 18.8 iv 23) is variously explained: it could be a relic form of the Anatolian nasal-stem **Hab-on-* (McCone, 1992: 109; Schaffner, 2015: 242; Schaffner & Steer in *eDiAna* 352), or it rather reflects CLuw. *ḫāpinni-* [c.] ‘stream, creek’ because the word occurs in a ritual text with many Luwianisms (Starke, 1981: 144).

56 Oettinger (1980: 62); Melchert (1989: 98 fn. 4); Kloekhorst (2008: 301–3); Schaffner (2015: 242); etc.

57 Sasseville in *eDiAna* 352; Schaffner (2020: 156 fn. 32).

word (PAnat. **Hab-on-t-* >) PLuw. **xab-an-t-* (CLuw. **ḫāpantiš*) from a characterizing derivative **-t-* on the word **Habon-* which would have been reanalyzed as an "ergative"~"agentive" 'River' in PLuw. (similarly to CLuw. *tiyamm-antiš* 'Earth' vs. *tiyammiš* [c.] 'earth', *tappaš-antiš* 'Sky' vs. *tappaš-* 'sky' with the suffix **-ont-* characterizing-personifier). The addition of the suffix **-t-* is reminiscent of the pair Hitt. *istaman-* 'ear' vs. CLuw. *tummanti-* 'ear' which illustrates the productivity of *-nt*-stems and their proximity to *n*-stems.[58] From **xab-an-t-* → **xab-ant-* and **xab-a/i-* that appeared secondarily, a separate word **xab-* was felt, on which would have been formed a verb **xab-ā-i̯é/ó-* 'to wet, irrigate, water' (Luw. **ḫapāi-*); verbs in **-ā-i̯é/ó-* are a productive class in Anatolian, in which case the word **xab-ā́-* [coll.] which was believed to be the base (source of the derivative characterizing **xab-ā́-d-* 'river valley') would be the backformation of the verb **xab-ā-i̯é/ó-*, by inversion of the derivational pattern coll. **-ā́-* → denominative **-ā-i̯é/ó-*. The Lydian word *kof(i)-** (one expects rather **kaf(i)-*) may be a loanword from an unattested Carian lexeme **kob* (< PLuw. **xáb-a/i-*), or perhaps a dialectal form as the one documented in Aphrodisias where lived the Torrhebians, a people that spoke a dialect of Lydian characterized by a Carian-like rounding of *a* to *o* under the stress.[59]

2.4. Concluding remarks

To conclude on this topic, we can affirm the following statements: (i) the root noun **h₂óp-*/**h₂ép-* must be definitively translated as 'current, flow, water in movement', hence, by successive colexifications, 'river, watercourse' and 'water', which semantically allows the reconstruction **h₂ep-h₃on-* 'possessing flows, currents' → 'river'; (ii) **h₂ep-h₃on-* can explain phonetically all the forms in Italic, Celtic and Anatolian without resorting to alternative explanations like completely different roots **h₂eb-* (**ab-*) ~ **h₂ebʰ-* 'river, stream' irreconcilable with the root noun **h₂óp-*/**h₂ép-* of the very same meaning, or by allomorphs due to some other phonetic phenomena on **h₂óp-*/**h₂ép-* which are unsubstantiated or unnecessary.

3. The alleged evidence for PIE **h₂ébʰ-*

Now, it is time to reassess the evidence gathered by Willi (2004) for the root †*h₂ebʰ-*. He postulated a heteroclitic proterodynamic stem **h₂ébʰ-r̥*, **h₂bʰ-én-s* [nt.] 'rapid stream' to account for the forms in this section and below, as well as the *n*-stem in Anatolian, Celtic, etc.

3.1. Greek ἄφαρ, and related forms

A first array of forms is represented by Greek: ἄφαρ [adv.] 'quickly, suddenly, forthwith, at once', ἀφρός [m.] 'foam', ἄφνω(ς) 'suddenly' (ἀφνός· ἐξαίφνης in Hsch.), and ἄφενος [nt.] 'wealth'. Some of these words are probably unrelated to our topic. To our mind, this seems to be so for ἄφαρ, which is often linked to ἄφνω(ς). Rather than from †*h₂ebʰ-*, we believe that ἄφαρ reflects for example a PIE etymon **sm̥-bʰh₂-ér* [adv.] 'appearing all at once, in a glimpse' on the root **bʰeh₂-* 'to shine, glimmer, radiate, appear' with the prefix **sm̥-* 'together, with; in one'.[60] In that case, the notion of 'swiftness' found in ἀφάρτερος 'faster' (Hom.) and ἀφαρεί· ταχέως

58 As a quasi-parallel, one can cite, for example, Lyc. A *pddãt-* 'place' < **pedánt-* with *-nt*-suffix vs. *pddẽn-* 'place, temenos, precinct' which is synchronically an *n*-stem but stems from PAnat. **pédom* (Hitt. *pēdan*), cf. Melchert (2004: 47–8).

59 Cp. *profr-* compared to the more common *prafr-*, cf. Chaniotis & Rojas (2016: 343).

60 *LIPP* 671–8; 717–29 **so*, *sóm* 'zusammen, mit, bei; gleich, derselbe', in the zero-grade as in **sm̥-dʰh₁-tó-* > Ved. *saddhá-* 'put together'.

καὶ ἀκόπως (*EM*) does not represent a primitive stage but a secondary development: ‘at once, suddenly’ ↔ ‘quickly, rapidly’ ↔ ‘quick, swift, fast’. This etymology would quite fit van Beek’s intriguing explanation of the name of the goddess Ἀφροδίτη as PGk. **Apʰr̥-dītā* ‘who appears forthwith (i.e. after sunset)’, an epithet of the morning star.[61] If related, as the expected reflex is PGk. **həpʰár*, it would have been remade as Late PIE **sḿ̥-bʰh₂-r̥*, PGk. **hə́pʰr̥* with a secondary final zero-grade, in the same way that some PIE **-én*-adverbs got secondary suffixal zero-grade, cp. PIE **lei̯p-r̥*, obl./loc. **lip-én* > Late PIE **líp-n̥* > Gk. λίπα [adv.] ‘greasing’, PIE **puk̂-én* > Late PIE **púk̂-n̥* > Gk. πύκα [adv.] ‘firmly, solidly, in a tight way’ (vs. πυκνός ‘tight, thick’, Lat. *pugnus* ‘(clenched) fist’ < **puk̂-n-ó-*).[62] The accent of ἄφαρ can also be of expressive nature: since ἄφαρ is ordinarily found in Homer at the beginning of a proposition (followed or not by δέ), it could have had a kind of exclamatory value, as in spoken French *(tout) d’un coup* and *tout à coup* ‘suddenly’, which can have an intensive accent on the first syllable of the syntagma (/ˈdœ̃ ku/, /ˈtu dœ̃ ku/, /ˈtu.ta ku/).[63] Formally, our hypothesis is not problem-free: for example, dialectal forms like †ὄφα/ορ – showing the Aeolic and Achaean change **r̥* > ορ (restricted the position after a labial consonant in Cretan) and the possible vocalic reflex ο of **m̥* next to a labial consonant – are expected. But ἄφαρ, as a separate word, seems found in Ionian-Attic only.

3.2. Greek ἄφνω(ς)

Gk. ἄφνω(ς) ‘suddenly’ is possibly a reflex of **h₂ep-*, rather than being related to ἄφαρ. If this assertion is correct, the only way to reconcile the Greek aspirate with the PIE unvoiced plosive of **h₂ep-* is to reconstruct a cluster **-psn-* > PGk. **-phn-* > **-pʰn-*. This implies that it somehow derives from an *s*-stem, which is not directly attested but known by some secondary forms: **h₂ep-s-ó-*,[64] supported by some river names,[65] and **h₂ép-s-on-* [f.],[66] reflected by PCelt. **axsū*/**axsŏn-* and **axsŏnā* (both being the source of several French hydronyms)[67] as well as the Lithuanian river-name *Apsuonà* [f.], as an internally derived substantive (unless it is an individualizing formation **h₂ép-s-on-*).

61 Van Beek (2022: 315–8), with **r̥* because of the *muta cum liquida* scansion of -φρ- in the Homeric corpus, and dialectal forms like Cret. Αφορδιτα, Pamph. Αφορδισιυς, Φορδισιυς. The second member **-dītā* comes credibly from the PIE root **dei̯h₂-* ‘to shine’. For other names referring to the morning-star, cf. Gk. ἐωσφόρος ‘dawn-bringer’ and Φωσφόρος ‘light-bringer’, Lat. *Lucĭfer* ‘light-bringer’, or Lat. *iŭbar, -ăris* ‘morning-star; first light of day; shimmering of the celestial bodies; sunlight, light’ < **di̯u-bʰeh₂-es-* ‘bringing the glow of the daytime sky’ (Dunkel, 1997). The meaning proposed by van Beek for **Apʰr̥-dītā* suggests it would have been used for the crepuscular counterpart of the morning-star (which was first considered as a different entity); this is not what we can expect, therefore another meaning could be suggested: ‘which makes suddenly appear [**Apʰr̥-*] the light [**-dītā*] (when dawn ends at the breaking of the horizon by the solar orb)’. All in all, van Beek’s solution remains hypothetic, and our etymology of ἄφαρ is posited on independent grounds.

62 This did not occur in αἰϝέν ‘always’ (PIE **h₂ei̯u̯-én*) though, perhaps due to the influence (at the Proto-Greek times) of the synonym *αἰϝές ‘id.’ attested in Doric. Dieu (2022: 517): “[e]n règle générale, dans les formes dissyllabiques, le suffixe repousse l’accent: μάλα « très », σάφα « clairement, manifestement », etc.”.

63 See also Dieu (2022: 506–7) for similar facts.

64 Of the type Ved. *vatsá-* ‘calf’ < **u̯et-s-ó-* ‘(characteristic of) that which is (born) during the (current) year’ < **u̯ét-es* ‘during the year’, cf. Vine (2009: 216).

65 PCelt. **axso-* / **axsā-* in the French river names *Asse* (Alpes-de-Haute-Provence), *Laz* (Tarn), *As* (Tarn, *de rivo de Asso* 1241), and in Welsh river names in *Ach-* and *-ach*; also Ἄψος, *Apsus*, Illyrian name of the river Seman in Albania. Cf. Schaffner (2015: 248), who translates ‘wasserreich, abundant in water’.

66 Cp. **h₃m̥bʰ-én* ‘at the navel’ → **h₃embʰ-ōn* ‘belly’ (Nussbaum 1986: 191).

67 From **axsū*/**axsŏn-*: river *Asson* (Vendée), river *Assou* (Tarn, *Assone* 9th century), *Ausson* (Haute-Saône, *Asson* 1185); from **axsŏnā*: river *Aisne* (Aisne, *Axona*, Αξόνα), river *Auxone* (Côte-d’Or, *Assona* 630).

3.2.1. The PIE "locative" **h₂ép-es*

There is no such *s*-stem in fact, so we start with a PIE "locative" **h₂ép-es*, not attested in itself as far as we know, but that can be formally compared to **u̯ét-es* 'during the year', and, in the same semantic sphere (but with another root grade), **ud-és* (on **u̯ód-/*u̯éd-* 'water'), which is the source of the secondary *s*-stem found in Ved. *utsá-* 'well, spring' (< **ud-s-ó-*), Gk. ὕδει dat. sg. 'water' (Hes. *Op*. 61, Theogn. 961W), as it is the case for **u̯ét-es* → Gk. ἔτος 'year'.[68] In **u̯ét-es*, the suffix is labelled as a "genitive of time", but for 'water' it could be rather genitive or ablative.[69] We choose here a translation referring to the origin of something from a location or an entity, which is close to an ablative: thus **h₂ép-es* 'from the running waters' → **h₂ep-s-ó-*, and **ud-és* 'from the gushing (water)'[70] → **ud-s-ó-*.

3.2.2. Secondary derivative **h₂ep-s-én* > **h₂ep-s-n-ó-*

On **h₂ép-es*, there was a first recharacterized locative **h₂ep-s-én* 'at/by the stream'. It gave rise to two semantically distinct formations **h₂ep-s-n-ó-*.

3.2.2.a. The first **h₂ep-s-n-ó-* was probably close to its origin, something like 'which is at the stream'. It was substantivized as **h₂ep-s-n-éh₂* [coll.] 'area close to the streams', reflected in Arm. *ap'n* (*-in*, *-amb*) 'shore, brink'.[71] The reflex of PIE **-psn-* was certainly Arm. *-p'n-*, in view of PIE **-ps-* > Arm. *-p'-*, as seen by *ap'* (-o-) 'palm of the hand', *ep'em* 'to boil' vs. Gk. ἄψος 'joints, articulation', ἕψω 'to boil'.

3.2.2.b. Assuming that 'streaming, flowing' → 'swiftly, rapidly, quickly'[72] → 'suddenly',[73] ἄφνω(ς) [adv.] could be then the outcome of PGk. **apsnós* > **aphnós* > **apʰnós* [adj.] 'quick, fast', from a second **h₂ep-s-n-ó-* [adj.] 'which is streaming'. It is an adverb of manner in ω(ς), reflecting the thematic instrumental ending **-o-h₁*. Since we posit an original adjective, notice that one expects ἀφνῶς* [adv.]: ἄφνω is marked as if it was from a non-deadjectival derivation (ἄφνως is more recent), and the position of the stress is abnormal (as this kind of adverb keeps the position of the stress of the adjective).[74] One should perhaps suppose an ancient prefixed form *ἐξάφνω (of the type ἐξαίφνης) to explain the stress of ἄφνω, or directly attribute it to the influence of αἴφνης, of similar structure.

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68 Vine (2009: 219–20).

69 Vine (2009: 220).

70 Our translation is referring to Rieken (2022: 353), who convincingly postulate that the particle **úd* 'empor, hinauf; hinaus, heraus' (*LIPP* 823–8) could be the source of **u̯ed-* 'water' (that is gushing forth).

71 Not related to the family of Gk. ἤπειρος 'landmass, coast', for which see 5.1. below.

72 There are several examples of this change: cp. Latv. *straujš* 'fast, quick, rapid' < PIE **sreu̯-* 'to flow'; PSl. **prǫdъkъ* 'swift, rapid, hasty', Ru. *prudkýj* 'id.', etc. < PSl. **prǫdъ* 'stream, current', deverbal of **pręsti* 'to spin'.

73 Many examples: MIr. *opunn* 'quick, swift, sudden', Ir. *tobann* 'quick, sudden'; Toch. B *ramer* 'quickly, suddenly'; etc.

74 See Dieu (2022: 510).

3.2.3. Secondary derivative *h_2ep-s-ér* and Greek ἀφρός ‘foam’

As the presence of foam often correlate with agitated waters in streams, Gk. ἀφρός ‘foam’[75] could go back to PIE *h_2ep-s-r-ó- > PGk. *apsrós > *aphrós > *ap^{h}rós, designating the thing ‘being (formed) at (the surface of) the vivid waters’,[76] derivative from a second recharacterized locative *h_2ep-s-ér ‘in/at the stream’ on *$h_2ép$-es.[77] Because it would be the only form in *-ér on *$h_2ép$-es, this is speculative, but our hypothesis is plausible on semantic and formal sides.

3.2.4. MIr. *esc* ‘water’

The aforementioned *$h_2ép$-es perhaps had a rare variant *h_2p-és, morphologically aligned with the zero-graded *ud-és. OIr. *uisce* [m.] ‘water’ comes[78] from PCelt. *ud-es-k-(i)yo-, a *-(i)yo-derivative on (late) PIE *ud-es-kó-, itself a decasuative derivative of *ud-és. By a kind of derivational symmetry, one could suppose *ud-es-kó- → *h_2p-es-kó- that would then explain MIr. *esc* ~ *eisc* ~ *easc* ‘water’, *esca-* [f.] ‘bog, quagmire, depression, puddle’, *esc-ung* ‘eel’ (= ‘water-snake’), from PCelt. *ϕesko- ‘water’.[79] As no other traces of *h_2p-és could be found for now, our etymology of MIr. *esc* remains speculative.

3.2.5. Greek ἄφενος

In the case of ἄφενος, Willi’s semantic analysis seems also acceptable to us.[80] Our theory leads to assume that this form is secondary from an unattested word *ἀφνός, supposed by Hom. ἀφνειός [adj.] ‘rich’[81] and by the verb ἀφνύ(ν)ω (ἀφνυέι· ἀφνυνέι· ὀλοΐζει in Hsch.).[82] This *ἀφνός would stem from *h_2ep-s-én ‘flowing, in torrent’ → *h_2ep-s-n-ó- [adj.] ‘which is in flood, abundant, aplenty’ (PGk. *apsnó- > *aphnó- > *ap^{h}nó-), on which was formed a substantive *ἀφνᾱ́ ‘riches, abundance’ (thus PGk. *apsnā́ > *aphnā́ > *ap^{h}nā́) and then an adjective *ἀφνᾱ-ϝός (PGk. *apsnā-wó- > *aphnā-wó- > *ap^{h}nā-wó-) ‘who has abundance, riches’ with an archaic suffix *-u̯o-, surfacing as Hom. *ἀφνηϝός (written ἀφνειός) ‘rich’, Att. ἀφνεός;[83] *ἀφνᾱ-

75 This word, of notoriously unclear etymology, has sometimes been compared to Ved. *abhrá-* ‘cloud, rainy weather’ (< PIE *n̥b^h-ró-), Lat. *imber* ‘rain’ (< PIE *n̥b^h-r-í-), from the root *neb^h-. This is indeed formally plausible, as ἀφρός can regularly stem from PIE *n̥b^h-ró-. Semantically, opinions differ: according to de Vaan (2008: 299) the relationship is “conceivable”, but the *DELG* 148 and Beekes (2010: 179) reject the connection, with good reason.

76 See 5. below for a similar semantic development in Celtic.

77 Of the type *u̯et-s-er in Ved. *vatsar* ‘in the year’ > °*vatsará-* [m.] in the word *saṃvatsará-* ‘a single year’, cf. Vine (2009: 213–4).

78 According to *NIL* 707 and Matasović (2009: 395); already in *IEW* 79.

79 This word was often reconstructed *φisko- and compared with the Gaulish hydronym *Iska*, or with Gk. πῖδαξ ‘spring’ (< *pih$_1$-d-), πίσεα ‘wet places, meadows’ (< *pih$_1$-d-s-), from the idea of ‘*overflowing’ on the root *peiH$_1$- ‘to be fat, big, abundant’. Both are not very convincing comparanda. *Iska could be related to PCelt. *ϕēsko- ‘fish’ (from a zero-grade PCelt. *ϕiskā?).

80 See Balles (1997) for a very different analysis (relationship with Ved. *ághnyā-/aghnyā́-* ‘the unkillable’, epithet of the cow), which is not convincing semantically on the Greek side.

81 Willi (2004: 323–4), challenging this view, interprets ἀφνειός as a syncopated form of a metrically impossible *ἀφενε(σ)-ιος in epic-dactylic tradition.

82 The verb ἀφνύω is perhaps dissimilated from the expected ‘factitive’ ἀφν-ύνω, rather than indicating a *u*-stem.

83 The Attic form is found in Theognis, an Attic poet using a language with some archaisms. According to *DELG* 146, the Pindaric hapax ἄφνος could be back-formed on ἀφνειός, but it can be a simple stress transfer from the adjective *ἀφνός.

ϝός explains also the place of the stress[84] and the consistent length of the second syllable of ἀφνειός in epic poetry.[85] Regarding ἄφενος, we believe it to be an analogical creation. Consider the compound εὐηφενής 'opulent, very rich'. It is known that it influenced the adjective εὐγενής 'well-born, of noble birth' to form, as early as Homer, an Epic (but corrupted) form εὐηγενής (*Il*. 11, 23), which was then used as a real form by later authors imitating Homer. If we push the comparison further, the influence between these two families could have been strong enough to create the lexeme ἄφενος as a *vox ex nihilo*: to εὐγενής corresponds the synonym εὐγνητος 'of noble birth', both related to γένος [nt.] 'birth, race, kin, offspring', which, by the effect of a double analogy, meant that to εὐηφενής could correspond a synonym εὐάφνητος*, which implied itself the underlying existence of ἄφενος [nt.][86] which is nevertheless artificial.[87]

3.2.6. PGerm. **aƀra-* and PCelt. **abro-*

The last bunch of forms with **h₂eb^{h}-* is found in the Celto-Germanic isogloss of PGerm. **aƀra-* [adj.] (Go. *abrs* [adj.] 'violent, raging, strong, severe', *huhrus abrs* 'extreme famine', *abraba* [adv.] 'strongly; very much, very', ON *afr(h)endr* 'with mighty/strong hands', *afar-* [adj.] 'much, very') and PCelt. **abro-* (OIr. *abar-*, MIr. *abor-*, W *afr-* 'much, very'). Rather than resorting to **h₂eb^{h}-*,[88] our solution would be the following, considering that these words are indeed related to the notion of 'current, running water': as PIE **-pr-* yielded PCelt. **-br-* regularly[89] and PGerm. **-ƀr-* in a Verner-context, one should posit (Late) PIE **h₂ep-r-ó-* [adj.] 'flowing, overflowing, torrential', built on a "locative" **h₂ep-er*[90] 'in torrents, à flots, *en torrent*'. The semantic shift was probably '(over)flowing, in torrents' → 'abundantly, superabundant; exceedingly, excessively' → 'extremely, very, much, highly' (intensive) and 'excessive, violent, extreme, strong'. It should be noted that the semantic development for Germanic could be a bit different: '(over)flowing' → 'exceeding' → 'violent, extreme, strong' → 'very, much, highly'; cp. the French adverbs *fort* 'strongly' and 'a lot, much, very', *fortement* 'strongly' and 'highly, extremely, much, very', or *violemment* 'violently, intensely' and 'very much' in idiolectal or sociolectal usages. We did not find other reflexes of **h₂ep-er* or **h₂ep-r-ó-* though.

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84 More naturally than with Willi's account (2004: 325).

85 Willi (2004: 325 fn. 3), with a different explanation.

86 Sometimes, ἄφενος has a different declension (masc. ἀφένοιο in Call., *AP*; masc. ἄφενον as a variant in Hes. *Trav.* 24), by analogy with πλοῦτος (according to *DELG* 146) or a false interpretation of the ambiguous nominative (according to Balles, 1997: 216). This fact is also compatible with a back-formation rather than variations or mistakes, but it cannot be proven (Balles' point is that the word was literary and not used much in the everday language).

87 This hypothesis can only be applied through Ionian phonetics, which is consistent with the very limited diffusion of the word (only Homeric in the earliest periods, and not found pan-dialectally). However, there are proper names Διαφένης, Κλεαφένης, Τιμαφένης, and Εὐᾱφένης, mainly found on Lesbos island, where Aeolian is spoken; that being said, nothing prevents us from supposing migrations of some Ionian peoples into the Aeolian dialect area, especially since the latter is surrounded by areas of Ionian dialect.

88 See Lehmann (1986) for the rejection of many old etymologies. Differently, Kroonen (2013: 1–2) starts from the root **h₃ep-* 'to work, be active' and relates it to **afla-* 'power', but does not mention the Celtic forms.

89 Matasović (2009: 9).

90 Of the type **μét-er* 'during the year', cf. Rau (2010). Here, for **h₂ep-er*, we do not use the label "locative" in its spatial use, but rather as a deck-word for a primitive oblique with different functions, like the instrumental.

4. A PIE "locative" **h₂p-én*

We have seen formations going back to *es-* and *er-*"locatives". With the common locative suffix **-én*, we can reconstruct **h₂p-én*[91] 'at the waterrun', a zero-grade locative that is formally parallel to the locative **ud-én* (cf. Ved. *udán* 'in the waters') of the root-noun **u̯ód-/u̯éd-* 'water'. Different delocatival stems were derived from it: **h₂p-en-ó-* 'watery' in PCelt. **φeno-* 'liquid' (MIr. *en* 'water', W *en-wyn* 'buttermilk'; PCelt. **φen-āko-* in MIr. *enach* 'swamp'), and **h₂p-en-i̯ó-* 'which is at the waters' (or **h₂p-en-i̯-ó-*, from **h₂p-én-i* of the type **ud-én-i*) → subst. **h₂p-en-i̯-eh₂-* in Lith. *pẽnė* '*Peplis*/*Lythrum portula*, water-purslane, *pourpier d'eau*'. These forms probably gave rise to a neo-root **h₂pen-*,[92] as seen by the ablauting derivatives **h₂pon-o/eh₂-* in MIr. *on-chú* 'otter' (lit. 'water-dog') and **h₂pon-i̯o-* in PGerm. **fanją* [nt.] 'mud, fen, swamp' (Go. *fani*, ON *fen*, OE *fenn*, OHG *fenni*, etc.; borrowed in Romance: Wall. *fanie*, *fagne* [f.] 'marshland, fen', Fr. *fange* 'filth, mire', etc.) and Baltic (OPr. *pannean* [nt.] 'swamp, ditch', Latv. *pane*, *paņa* [f.] 'liquid, manure', Lith. *paniabùdė* 'forest mushroom growing in damp places'), as well as **h₂pn̥(n)-* in PCelt. **φănā* (Gaul. *anam* gl. paludem, MIr. *an* [f.] 'water, urine'),[93] and PGerm. **fun-* (ON *fúna* 'to rot, decay'; **funiz ~ *funją*[94] in OE *fyne* [m.] 'wetness, mold', etc.). A decasuative formation with a velar **h₂p-en-kó-* or **h₂p-n̥-kó-*[95] 'that is watery, damp, moist, soaked' gave rise to a neo-root **h₂penk-*,[96] as seen by the ablauting derivatives **h₂ponk-ó-* in Skt. *paṅka-* [m./nt.] 'marsh, mire, bog, mud, slush' (unless from **h₂penk-ó-*) and PGerm. **fanga-* [nt.] 'mud, swamp' (problematic: unattested, but supposed by Romance borrowings: OFr. *fanc*, *fainc*, *fang* [m.], Ital. *fango*, Cat. *fang*, etc.), as well as the zero-grade **h₂pn̥k-* in PGerm. **funxtuz ~ *funxt(i)jaz* 'wet, moist, damp' (OE *fūht*, OHG *fūht*, etc.).

5. The Celtic 'foam'

The obscure PCelt. word **φowino-* 'foam, froth' (OIr. *úan*, MW *ewyn*, MBret. *eon*, etc.) cannot be easily connected to the common PIE word **(s)poi̯(hₓ)-m/n-o/eh₂* 'foam, froth, saliva' (Lat. *spūma*, Véd. *phéna-*, PBSl. **(s)páiˀnāˀ*, PGerm. **faimaz*, etc.; expected PCelt. **(s)φoyno-/ā*) for obvious formal reasons. We proposed above that Gk. ἀφρός 'foam', as the 'being (formed) at (the surface of) the vivid waters', was built on **h₂óp-/*h₂ép-*. Tentatively, supposing that the Celtic word comes from the same semantic development, we posit an endingless loc. **h₂p-éu̯* 'in the agitated waters', with a secondary *i*-loc. **h₂p-éu̯-i* → decasuative **h₂p-eu̯-i-nó-* 'what is in/at the vivid waters' (of the type **(s)up-er-i-no-* > Lat. *supernus*, Arm. *verin*, on **(s)up-ér-i*). The phonetic proximity of PCelt. **φowino-* and **(s)φoyno-/ā* leads to suppose they were found in an alliterating formula PCelt. **φowino- (s)φoyno-/ā* 'froth from the whitewaters(?)' with semantic transfer to the epithet and loss of the *nomen proprium*. This locative **h₂p-éu̯* could have been

91 Also Neri, in Neri & Ziegler (2012: 67). We thank the anonymous reviewer that gave us this reference where the same idea, with little differences in the derivative scheme, is expressed.

92 *IEW* 807–8 **pen-*.

93 If not from Joseph's Rule: **φenā*, acc.sg. **φănăm*, but this is *ad hoc*. Otherwise a secondary PCelt. derivative based on a ablaut **-en-/-ăn-*, as if from a nasal-stem.

94 Perhaps remade from PIE **h₂pén-ih₂* / **h₂pn̥n-i̯éh₂-s* → PGerm. **fenī* / **funjōz*.

95 Of the type **ud-n̥-kó-* > ClSkt. *udaka-* [n.] 'water', if old enough.

96 The relationship of MIr. *éicne* 'salmon, fish' to PIE **(h₂)penk-* is possible but not certain. The PCelt. form could be **φenkīnyo-* (*IEW* 808; Neri, in Neri & Ziegler, 2012: 67, posits **h₂penk-ih₂nḭo-*), or **(φ)anke/i/īnyo-* as well. Stifter (2023: 184) posits **ankinyo-/ankenyo-* referring to the salmon as a 'hooked fish' (from PIE **h₂enk-* 'to bow, bend') or a 'forceful fish' (related to OIr. *éicen* 'necessity, compulsion'), but this is not compelling.

part of a fully declined word **h₂ép-ou̯-/*h₂p-u̯-* [coll.] 'mass of agitated waters' of amphikinetic pattern, but there is no indication of its existence, thus it seems that **h₂p-éu̯* was the oldest form and the sole one.[97]

6. *In principio erat Praeverbium*: some compounds with PIE **h₂óp-/*h₂ép-*

The root noun **h₂óp-/*h₂ép-* is also known in its zero-grade form by several examples as second member of prepositional compounds, such as PIE **du̯i-h₂p-ó-* 'with the waters that separate/split'[98] → Ved. *dvīpá-* [m.] 'island (in a river); sandbank', or PIE **ni-h₂p-ó-* 'beneath in the water' → Ved. *nīpá-* 'situated low, deep', PIE **proti-h₂p-ó-* 'against the stream' → Ved. *pratīpá-* 'upstream', etc. We will discuss four additional examples that developed concrete semantics from originally simple locational syntagmata.

6.1. PIE **h₂e-h₂ep-*

The family of Gk. **ἄperi̯os* 'landmass, continent, mainland; coast' (Att. ἤπειρος, Dor. ἄπειρος, Aeol. ἄπερρος) and PGerm. **ōferaz* 'shore, border, coast, edge' (OE *ōfor ~ ōfer* [m.] 'edge, border, margin', MDu. *oever* [m./f./nt.] 'shore', MHG *uover* [nt.] 'shore', etc.) has been variously explained, and sometimes been linked to **h₂óp-/*h₂ép-*.[99] As in *Od*. 5 56–57 ἤπειρος refers to the terra firma (ἐκ πόντου βὰς ἰοειδέος ἤπειρόνδε / ἤιεν 'he walked out the violet sea and reached the dry land'), the semantic motivation is compelling.

6.1.1. Some previous attempts

The majority of scholars that accept the hypothesis that this set comes from **h₂óp-/*h₂ép-* admit an original long vowel in the root. Zehnder[100] starts from an *er*-locative **h₂ep-er* with a *vr̥ddhi* delocative **h₂āp-ero-*[101] "was mit 'am Wasser' in Verbindung steht", "am Wasser gelegen ist" built after the colouring effects of the laryngeal (not **h₂ēp-*, because of Eichner's Law). Neri[102] interprets this as a locative **h₂āp-ér + *i* 'by the water' built on Late PIE loc. **h₂āp-* by analogy on the model **pód-/*péd-*, loc. **péd*.[103] However, as ingenious as these theories may be, we find it very difficult to accept an analogical *vr̥ddhi *h₂āp-*.[104]

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97 The locative **h₂p-éu̯* is similar to the loc. **d(V)m-éu̯* 'in the house' built on the root-noun **dóm-/*dém-* 'house', from which was internally derived ***dm-ou̯-h₂* > **dm-ṓu̯-* [coll.] 'house staff' → count plural Post-PIE **dm-ṓu̯-es* 'household, servants' (Gk. *δμῶϝες) > Gk. δμώς [m.] 'slave, servant'; built on Widmer (2008). Rau (2009: 35 fn. 11) assumes that "**dém-ou̯-/*dm̥-u̯-´* is originally an amphikinetic internal derivative of the acrostatic *u*-stem that appears in Lat. *domus*, *-ūs* 'house', OCS *domъ*, *-ove* 'id.' and Vedic *dámūnas-* 'lord-house (uel sim.)'".

98 Usually understood as 'with water on both sides'. Semantic suggestion of Leonid Kulikov (p.c.).

99 Among other reconstructions, one finds also the hypothesis of a relationship with the particle **apó* 'away, off', notably Ved. *ápara-* 'behind, later, western' < **ap-ero-*, with secondary *vr̥ddhi *āp-ero-*; rejected by Zehnder (2012: 470) for semantic reasons, supported by Olsen (1999: 136), *LIPP* 69 fn. 15. Without internal analysis are **Heh₂per-* in Beekes (2010: 522) or **h₂eh₁₍₂per-(i)o-* in Kroonen (2013: 394).

100 Zehnder (2012: 471), followed by Schaffner & Steer in *eDiAna* 352.

101 On the model of **h₂u̯es(s)er* > Skt. *vasar* 'at the morning' → Ved. *vāsará-* 'appearing in the morning'.

102 Neri (2017: 223 fn. 74).

103 The alleged parallel model **Hāu̯is + en* 'in sight' → **Hāu̯is-on-* > Gk. ἠϊών, Dor. ἀϊών 'shore, bank (which is visible from the boat)' is perhaps not parallel, as **Hāu̯is* (found in Ved. *āvíṣ* [adv.] 'evidently, obvious, before one's eyes', Av. *āuuiš* 'id.', OCS *(j)avě* 'evident, known') can rather represent a prepositional compound **h₂o-h₁u̯-ís* with the root 'to see' as **h₁eu̯-* (Garnier & Hattat 2019: 4).

104 Similar conclusion in *LIPP* 69 fn. 15.

6.1.2. On Klingenschmitt's hypothesis

An interesting hypothesis is Klingenschmitt's etymon[105] **e-h₂p-ero-* 'der am Wasser gelegene Teil des Landes'. It explains the long vowel without resorting to an analogical lengthened grade, but the first morpheme is unclear and not explained,[106] so it makes this hypothesis not totally convincing. In our opinion, although one can at a pinch accept the hypothesis of analogical *vr̥d-dhi*, the hypothesis of a prepositional compound seem to us to be a more promising solution. Our proposition is an etymon **h₂e-h₂p-ér ~ *h₂e-h₂p-ér-i* 'at/by/near/towards the stream/water, am Wasser gelegen, *près / au bord de l'eau*' (= *ad aquam*) with the particle **h₂e* 'to, towards, at'[107] and the *er*-locative. Delocatival derivatives were then created: **h₂e-h₂p-er-ó-* (in Germanic) and **h₂e-h₂p-er-i̯-ó-* (in Greek, with accent shift from the substantivization process) 'which is at the waters; portion of land at water, waterside, *bord de l'eau*, shore, bank, coast'.

6.2. PIE **u̯e/o-h₂ep-*

Witczák (2015) analysed the underlying root of Ved. *vāpī́-* 'pond, pool, lake, reservoir, etc.', PSl. **vapa* (OCS *vapa* 'lake', Ukr. ва́па 'place with standing water; boggy place', Slov. *vápa* f. 'puddle', etc.)[108] as a compound with negative meaning **h₂u̯e-h₂p-ó-* 'not moving water' > 'stagnant water', with secondary substantivations **h₂u̯e-h₂p-éh₂* and **h₂u̯e-h₂p-íh₂*. However, this very intriguing idea presents serious formal and semantic issues.

6.2.1. Formal and semantic reconstruction of the preverb

Witczák follows the common assumption that the preverb **h₂u̯e-* 'away' derives from **h₂eu̯-* 'away', the laryngeal of which seems suggested by Gk. αὐ-, PIt. **au-*, PCelt. **au-*, etc. Nonetheless, Hitt. *u-* and CLuw. *aw-* ~ *ū-* clearly demonstrates there was no laryngeal,[109] so we must reconstruct **au̯* 'weg, fort, ab', zero-grade **u̯-ó* and **u̯-é*.[110] Witczák's etymon should be then, preferably, rewritten **u̯e/o-h₂p-ó-*. With or without this little formal adjustment, the semantic interpretation is not very compelling: it cannot be proven that the first meaning of **u̯e/o-* would have evolved into a privative/negative function[111] already from the PIE period, and all the provided examples for that are sparse and found in isolated lexemes, indicating independent developments.

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105 Klingenschmitt (2005: 542).

106 It seems to be the anaphoric particle **e*, according to *LIPP* 69 fn. 15, but it does not make sense to us in nominal composition.

107 *LIPP* 323–34.

108 *IEW* 1149.

109 The assumption of an outcome **h₂o-* > PAnat. **ʔo-*, as *per* Kloekhorst (2008: 75) is problematic as some words contradict this, for instance PIE **h₂o* 'towards' which yields Luw. *ḫā* 'id.' and – more importantly – Lyc. *xe* 'id.', the vowel of which proves **o* in Proto-Anatolian.

110 *LIPP* 96–105 **au̯* 'weg, fort, ab', *LIPP* 839–45 **u̯e* 'weg, ab; ohne'. Both particles are, curiously, etymologically separated by the *LIPP*, contrary to the *communis opinio*.

111 The chain DISTAL distancing from someone → PRIVATIVE deprived of, not having something → NEGATIVE is a common development.

6.2.2. About Hittite *u̯appu-*

According to Witczák, the link with Hitt. *u̯appu-* [c.] 'river bank, wadi'[112] has to be rejected because it could rather be related to PIIr. **u̯ap-* 'to strew, scatter';[113] nevertheless, the underlying root of the latter seems to be PIE **h₂u̯ep-*, as evidenced by Hitt. *ḫuu̯app-ⁱ / ḫupp-* 'to throw, hurl', *ḫūppa-* 'heap', if indeed related to the Indo-Iranian root (therefore **Hu̯ap-*).[114] His main argument for the rejection of *u̯appu-* is phonetic: to his mind, **u̯eh₂p-u-* would yield Hitt. **u̯aḫpu-*. This is incorrect: **h₂* is not preserved as such when it follows a plosive consonant, cf. Hitt. *u̯āk-ⁱ / u̯akk-* 'to bite' ← PIE **u̯eh₂ĝ-* (Gk. ἄγνυμι 'to break', Toch. AB *wāk-* 'to split, burst'), Hitt. *-ātar / -annaš* abstract ← PIE **-éh₂-tr̥ / *-eh₂-tn-ós*,[115] Hitt. *lāpp-ᶻⁱ / lapp-* 'to flash, glow' ← PIE **leh₂p-* (Gk. λάμπω 'to shine', Lith. *lópė* 'light, etc.'). The reconstruction can be then precised: an internal laryngeal is entirely conceivable, and due to the constant notation *-ap-pV-*, indicating that the medial plosive was unvoiced, we can determine that the stress was not on the vowel preceding the laryngeal **-Vh₂pV-* because in this context the labial plosive would be lenited.[116] A plausible proto-form for Hittite is then **u̯e/oh₂pú-*, parseable as **u̯e/o-h₂p-ú-*.

6.2.3. Meaning of the compound

As the Hittite word can be formally related, we have to reassess the semantics of the supposed compound in order to find a link, since it seems impossible to derive 'river-bank' from 'not moving water', as well as to admit that the preverb **u̯e/o-* already had a negative meaning in PIE (as stated in 6.2.1. above). Both meanings 'river bank' and 'waterbody' can be linked together only if they arose from 'border, shore, bank': lakes and ponds are *par excellence* surrounded by land, hence by banks. Ultimately, this compound **u̯e/o-h₂p-ó-* (or simply **u̯e-h₂p-ó-*) has therefore to be etymologically glossed 'away from the stream' – that is to say from the centre of the river –, yielding then 'border, shore, river-bank'. The Slavic and Vedic forms are indeed secondary substantivations **u̯e-h₂p-éh₂* and **u̯e-h₂p-íh₂* 'things having shores' while the Hittite word comes from a secondary *u*-stem abstract **u̯e-h₂p-ú-* 'out-wateriness, riparian-ness'[117] of the aforesaid adjective, itself concretized as 'river bank'.[118]

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112 Kloekhorst (2008: 958), for whom it "has no good etymology". There is not enough evidence (only one form acc.pl. *u̯a-ap-pa-mu-uš* KUB 33.10 i 11) to assert that *u̯appu-* was an original ablauting word *u̯appu-/u̯appau̯-* (*pace* Kloekhorst *ibid*.; see Weitenberg (1984: 52–4) for the attested forms, (1984: 308–9) for an historical treatment of the *u*-stems).

113 Ved. *vápati* 'to throw up, heap up'. In view of Skt. *vapra-* [m./nt.] 'rampart, earthwork, hillock, mud wall; high river-bank, shore' (vs. PIr. **u̯afra-* 'snow'), this could be a serious possibility.

114 Kloekhorst (2008: 369); see *eDiAna* 641 for the Anatolian data.

115 Melchert (1994: 86). Differently, but not without problems for the morphological interpretation, Kloekhorst (2008: 226).

116 By the second Eichner's law; see Adiego (2001) for a moraic interpretation of the Anatolian lenitions, accepted by Melchert (2020: 262).

117 See Nussbaum (1998b: 527) for this type of derivation.

118 It was kindly suggested to us by Adam Hyllested (p.c.) that PGerm. **ōferᶻ* 'shore, border' (see 6.1.) could represent ***wōferᶻ* < **u̯e/o-h₂p-ér* with dissimilation in a highly labialized context, although we are not aware of such a dissimilation in the Germanic lexicon.

6.3. PIE **ko-h₂ep-*

There is a famous correspondance between OIr. *cúan* [m.] ‘port, harbour, bay, gulf; expanse of water, sea, river, waters’[119] and PGerm. **xaƀanō* [f.] ‘haven, harbour’.[120] Traditionally, when not considered as substrate words, they are attached to PIE **keh₂p-* ‘to seize, catch, hold, contain’:[121] the harbour is here interpreted as ‘das Umfassende, containing, comprising’, something like ‘place that holds ships’.[122]

6.3.1. An implausible connection with **keh₂p-*

This is a mere “root-etymology”, because ‘the containing’ is too abstract to be a convincing denomination for a harbour. Furthermore, the meaning ‘to contain’ cannot be of Indo-European date: it is only found in Latin, but this is because of the preverbed form *concĭpĭō* ‘to contain’ that transferred its meaning to the simplex *căpĭō*, in the same way that Fr. *tenir* can mean ‘to contain’ (and not only ‘to hold’) because of *contenir* ‘to contain’. The Latin containers names seemingly related to *căpĭō* are probably named not only because they can contain something, but also because they had handles (*căpŭlus* ‘coffin’ and ‘handle, grip’, *căpŭlum* ‘handle; hilt; bier, coffin, funeral litter’, *căpŭla* ‘handled vessel’; *căpēdō*, *-ĭnĭs* ‘handled vase for sacrifices’ and probably *căpūdō* ‘vase for sacrifices, jug’) or leather straps (*capsa* ‘circular wooden box for books’), so they can be easily seized and held. These words are not that old: *capsa* is probably back-formed on an iterative verb **cap-sāre* built directly on *căpĭō*,[123] *căpēdō* is formed with the suffix *-ēdō* (and *căpūdō* by *Suffixwechsel -ēdō → -ūdō*), *căpŭlus* and *căpŭla* are instrumental nouns from PIt. **kăp-elo-*, etc. One may also interpret in this way PGerm. **xafna-* in OHG *havan* [m.] ‘pot, cooking vessel’, G *Hafen*, if there were grips. PCelt. **kaφuko-* (OIr. *cuach*, *cuäch* ‘bowl, goblet, cup’, W *cawg* ‘cup, dish’) ~ **kaφuto-* (OIr. *cuäd* ‘cup, mug’) is perhaps, for the same reason, a possessive derivative **kh₂p-u-kó-* ~ **kh₂p-u-tó-* ‘having handles, grips’.[124]

6.3.2. Another semantic suggestion with **keh₂p-*

Consistently with the preceeding facts, the other reflexes of the verbal root **keh₂p-* show the original meaning was ‘to catch’ with the hands or arms[125] (‘to seize, grip, grasp’, essive ~ perfect

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119 Ir. *cuan* ‘bay, harbour, port’, Scot. Gael. *cuan* ‘sea, ocean, large lake; harbour, haven, bay’, Manx *keayn* ‘sea’. Diverse PCelt. reconstructions: **kaφono-* (Kroonen, 2013: 197), **kaφno-* (Stifter, 2023: 179), **kawno-* (Matasović, 2009: 197) ~ **kauno-* (van Sluis, Jørgensen & Kroonen, 2023: 215).

120 ON *hǫfn* [f.] ‘harbour’ (Icel. *höfn*, Far. *hafn* ~ *høfn*, Dan. *havn*, Nw., Sw. *hamn*), late OE *hæfen* ~ *hæfene* [f.] ‘(sheltered) inlet; haven, harbour, port’, E *haven* ‘harbour, anchorage’, MDu. *havene* ‘harbour’, MHG *habene*, etc. The reconstruction **xaƀanō-* best accounts for all the reflexes; the OE form (if not borrowed from ON) is consistently spelled with *e* in the second syllable, indicating a real vowel in the PGmc etymon; if it was **xaƀnō-*/**xafnō-*, at least some occurrences would have had †*hæfn* (similarly to PGmc **swefnaz* ‘sleep’ > OE *swefn*). ON *hǫfn*, showing the Old West Norse *u*-umlaut, implies Proto-Norse **xaƀnu-* with regular syncope of an unstressed short vowel in the second syllable, as in *ǫgn* [f.] ‘chaff, husks’ < PGerm. **aganō-*, OHG *agana*.

121 *LIV*² 344–5.

122 *IEW* 527–8 (**kapno-*), Matasović (2009: 197 ‘*kHp-no- ‘take’’), de Vries (1977: 279), Watkins (1985: 27), etc. According to Stifter (2023: 178), it is because of the topographical appearance of harbours, which are like ‘pots’ (PGerm. **xafnaz*), but this is unconvincing.

123 Garnier (2016: 154); also *capsus* ‘wagon-box; kind of cage for wild animals’.

124 Built on a PIE *u*-stem **keh₂p-u-* ‘seizure’. From this can be explained OIr. *cúach* ‘fastener, hook, buckle for cloak, hair, brooch, clasp’ < PCelt. **kaφuko-* ‘holder’ too.

125 With a (expressed or implied) complement ‘with the mouth/the teeth’, it can reach the meaning ‘to bite, devour’, cf. Gk. κάπτω ‘to devour, to gulp down’, to compare to Lat. *capessere cibum dentibus* ‘to seize food

'to hold in hands, have'), and with bands or ropes[126] or even a net.[127] Even with this meaning, a relationship of 'harbour' with **keh₂p-* above remains a possibility, but it would have been because of the ropes used to fastening the boat at the mooring, for example (although there is no proof of that). Alternatively, following the model of PCelt. **kagyom* 'enclosure, pen'[128] > (Gaulish →) OFr. *cail* ~ *kay* ~ *kai* > Fr. *quai* 'quay, wharf', it could be related to **keh₂p-* 'enclosed piece of land',[129] itself possibly related to **keh₂p-* 'to seize, catch'.[130]

6.3.3. Other Germanic cognates

Last but not least, the addition of PGerm. **xaƀą* [nt.] 'lagoon, sea'[131] and **xōpą* [nt.] 'bay, inlet; pool'[132] as cognates made by Kroonen[133] also changes the game. The second one has no etymology, while the first one has been directly compared to ON *-haf* 'elevation',[134] linking the word to the verb **xaƀjaną* ~ **xafjaną* 'to lift, raise' (from PIE **keh₂p-*), because of the movements of the waves: although possible, this is not convincing enough because one could rather expect to find a broader meaning range like 'wave ~ (agitated) sea' or even 'lifting of the sea level, tide' but not only 'lagoon, sea'.

6.3.4. How appears the meaning 'port, harbour'?

But the most important point is the polysemy 'port, harbour' <> 'bay, inlet, cove, etc.' <> 'sea' ~ 'pond, pool, lake' within this set and in a same word (in OIr.). The colexification of some of these meanings within a word family or a sole word is paralleled in several languages:

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with the teeth' (Cic. *Nat. 2, 12*) or, with a different root, Hitt. *karāp-/kare/ip-* 'to devour' from **gʰrebʰ-* 'to take, seize, hold' (Ved. *gṛbhnáti*, etc.). The Greek verb seems old (< **kh₂p-i̯e/o-*, cognate of Lat. *căpĭō*), but the related substantive κάπη [f.] 'crib, manger' (Hom.) is perhaps not inherited: it is rather a back-formation from κάπτω, designating the manger as the 'place of the gulping down (for animals)'; then, it is not directly comparable to the inherited Alb. *kapë* [f.] 'armful of corn; shock, pile'.

126 Notably Lat. *căpŭlum* 'lasso', *mūscĭpŭlum* 'mousetrap', *căpistrum* 'muzzle, harness, headstall; band for fastening up the vine; belt for the wine-press', possibly *cassēs* 'hunting net; spider web' if back-formed from **cassĭāre* < **capsĭāre* (Garnier, 2016: 340), and PGerm. **xafaƀla-* [nt.] 'band, tie, thread' (Icel. *hafald* n. 'heddle, heald', OE *hefeld* 'warp, thread for weaving', MLG *hevelte* 'warp', etc.), **xafta-* 'band, fetter' (ON *hapt* 'fetter', OHG *haft* 'band, fetter', etc.; derived verb **xaftijaną* 'to make bound, bind').

127 Cf. PIE **kēh₂p-ó-* > PGerm. **xǣƀa-* 'fish-net' (ON *háfr* [m.] 'fish trap, fish-net with a long handle', Icel. *háfur*, etc.).

128 MW *kay* 'hedge, enclosure', W *cae* [m.] 'field', etc., cp. PGerm. **xagjō* [f.] 'enclosure'.

129 Gk. **κᾶπος* [m.] 'enclosure, garden' (Att. κῆπος 'garden, orchard, plantation', Dor. κᾶπος); PGerm. **xōƀō-* [f.] 'piece of land' (OS *hōva*, MDu. *hoeve*, OHG *huoba*, etc.); Alb. *kopsht ~ kopësht* [m.] 'garden'.

130 Cp. **ko-gʰr̥-ti-* [f.] 'enclosure' > Lat. *cohors* 'court, yard', **gʰor-tó-s* > Lat. *hortus* [m.] 'garden', Gk. χόρτος [m.] 'enclosure', probably built on the root **gʰer-* 'to enclose, girdle, encircle; seize, grasp' of Ved. *HṚ* 'to take, bear, carry, convey, fetch, bring', etc.

131 ON *haf* n. 'sea, ocean' (Icel. *haf* n. and *úthaf* n., Far., Nw., Sw., Dan. *hav* n. 'id.'), OE *hæf* n. 'sea; water', OFris. *hef* 'sea, lagoon', MHG *hap* (gen.sg. *habes*), MDu. *haf* 'sea, ocean', MLG *haf*. Gm. *Haff* [nt.] 'a lagoon behind a spit, particularly in the Baltic Sea' (hence E *haff* 'id', Pol. *haf* 'bay, cove, gulf') and Du. *haf* 'lagoon, piece of sea located behind a headland' are from MLG *haf*.

132 ON *hóp* [nt.] 'a small landlocked bay or inlet, connected with the sea so as to be salt at flood tide and fresh at ebb, shallow bay', Icel. *hóp* 'broad bight at a river-mouth', Far. *hópur* 'small bay', Nw. *hop* 'bight', dial. Dan. *hob* 'puddle of water', and OE *hōp* 'pool' (in *mōr-hop* 'pool in a marsh, marshy pool', *hōp-ġehnāst* 'the dashing together of waves in a bay').

133 Kroonen (2013: 197, 240).

134 *IEW* 528; de Vries (1977: 201).

sea, ocean	
<> inlet, bay, cove, etc.	cf. Lith. *mãrios ~ mãrės* [f.] *plur. tant.* ‘sea; bay separated from the sea by dunes’, Latv. *mare ~ maŗa* ‘bay, lagoon’, OPr. *marri* ‘bay’; from PIE **mór-i-* ‘sea’. cf. PGerm. **wēgaz* ‘wave, water flow; sea’, OE *wǣġ* ‘wave’, OS *wāg* ‘stormy sea’, vs. ON *vágr* ‘wave; ocean, sea; small inlet’, Icel. *vogur* ‘bay’, Far. *vágur* ‘bay’, Nw. *våg* ‘narrow inlet, voe’, etc.
<> any waterbody	cf. PGerm. **saiwiz* [m.] ‘waterbody, sea, lake, ocean’ > Germ. *See* [m.] ‘lake’ and ‘sea’, ON *sær ~ sjár ~ sjór* [m.] ‘sea, ocean’, OE *sǣ* ‘sea’, etc. cf. PIE **lók-u-* ‘lake, pond, pool, waterhole, tank’ > PGerm. **laguz* [m.] ‘water, wetness, sea, ocean’ (ON *lǫgr* [m.] ‘sea, lake, water’, OE *lagu ~ lago* [m.] ‘water, sea, lake’, etc.) and PGerm. **laxō* [f.] ‘lake; pond, pool’ (ON *lá* [f.] ‘the line of the shoal water along the shore’, Icel. *lá* [f.] ‘the part of the sea near to the shore, billow’, MHG *lā* [f.] ‘puddle, pond, swamp, marshy meadow’) cf. PBalt. **jūˀr-āˀ/jāˀ/ijāˀ-* ‘sea’ (Lith. *jū́ra* [f.], *jūria* [f.], *jū́rė* [f.] ‘sea’, Latv. *jũra ~ jũŗa* [f.] ‘sea, mass of water, lake’, etc.) vs. **jauˀr-* ‘bog, marsh’ (Lith. *jáura, jáurė, jáuris* ‘wet and infertile soil; soil with clay’, *jáura(s)* ‘bog, deep water’, etc.); but ‘lake, pond’ in the Fenno-Volgaic borrowing **järwä* (> Finn. *järvi* ‘lake’, etc.) cf. PGerm. **mari-* ‘lake, sea’ (Go. *mari-saiws*, ON *marr*, OE *mere*, OHG *meri*, etc.) vs. **mōraz* ‘marsh, moor’ (OE *mōr*, OHG *muor* ‘marsh, moor’, MDu. *muer* ‘bog, pit, mud’, etc.) cf. Ar. *baḥr* ‘sea’ and ‘large river’

The different kinds of expanses of water can colexify unproblematically: the sea is frequently viewed as a “great lake”, or a lake as a “little sea”, etc. The colexification of ‘sea’ or ‘lake, pool’ with ‘bog, marsh, swamp’ is also easy to explain – mainly because of the wet areas at the margins of the seas or the lakes (the coastal wetlands) – by a kind of metonymy.

port, harbour	
< inlet, bay, cove, etc.	cf. Ingr. *salmi* ‘port, harbour’ < PFenn. **salmi* ‘strait, sound, narrow passage of water; inlet, bay;’ cp. PSam. **čoalmē* ‘strait, narrow’, ?Udm. сюм *śum* ‘bay, cove’ cf. Lith. *úostas*, Latv. *uõsta* ‘port, harbour; mouth of a river’ < PBalt. **(ʔ)ōˀsta/ā-* ‘mouth of a river, estuary’ < PIE **$h_x$óh$_x$-s-to/eh$_2$* ‘mouth’
< river	cf. Chin. *gǎng* ‘(*hydrology*) tributary; (dial.) river; port, harbour’ < OC **kroːŋʔ, *gloːŋs*; related to Mand. *jiāng* ‘Yangtze river; river’ < OC **kroːŋ*; originally a riparian harbour
< any waterbody	cf. SCr. *lúka* ‘harbour, seaport, port’ < PSl. **lǫ̑kà* ‘low-lying meadow, water-meadow’ (Cz. *louka* ‘meadow’, etc.); semantic development: ‘water-meadow’ ~ ‘marsh’ > ‘marshy place (~ shallow area) at the coast of the sea’ where can be set a > ‘harbour, port’ cf. Gk. λῐ́μνη ‘lake, marsh, basin; sea’ vs. λῑμήν ‘harbour, dock, protected creek; haven, refuge;’ cp. Toch. **lʲəmə(n)*, A *lyäm*, B *lyam* ‘lake’ < **li-mn̥*

In these examples, ‘port, harbour’ is always a secondary development, as shown by the etymological comparisons.

6.3.5. Primitive harbours

We argued earlier (see 6.2.3.) that 'border, shore, bank' is a plausible starting point for the name of a waterbody (like a lake, a pool, the sea, etc.). In view of the polysemy 'port, harbour' <> 'bay, inlet, cove, etc.' <> 'sea' ~ 'pond, pool, lake', it could be so for 'port, harbour' too. Indeed, the plainest natural harbours of the Indo-European community, most often in riparian or lacustrine environments, were probably a (slightly elevated) bank of a river or a lake on which the boat was landed and pulled ashore,[135] before the building of wooden jetties or wharves and the development of maritime harbours in inlets, bays, coves, etc. (partly surrounded by land). We suppose that the primitive etymon should have meant 'bank, shore'; in any case, 'harbour' is secondary (and so for the meaning 'sea', as the ancestors of Germanic and Celtic peoples did not attain the sea or the ocean at the same time during their migrations).

6.3.6. A different hypothesis

All these elements lead us to reconstruct a compound **ko-h₂p-* '(area where the land is) in contact with water' > 'bank, shore, coast, area of shallow waters' with the preverb **ko-* 'near, in contact with, with'.[136] It is not sure how old and what are the derivational backgrounds of the reflexes of this compound. It is perhaps useless to project back to PIE all the attested forms. Perhaps should we suppose that the compound was first **ko-h₂ép-*[137] that was remade as **kóh₂p-s*/**kh₂p-és*[138] by reinterpretation of the weak stem as a strong stem **CóC-s* of a (secondary) root-noun. The result of this restructuration is a Late dialectal PIE root noun **kōp-s* / **kăp-é/ós* 'bank, shore'.

6.3.6.a. An adjective **ko-h₂p-ó-* could be the base of a collective **kh₂p-éh₂* [nt.] 'set of banks', hence a secondary singulative Late PIE **kh₂p-ó-m* [nt.] 'waterfront, coast'[139] yielding PGerm. **xaƀą* 'lagoon, sea', admitting this word is indeed related: the meaning of OFris. *hef* 'sea, lagoon', and G *Haff* 'lagoon behind a spit', Du. *haf* 'lagoon' – the last two borrowed from

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135 This can appear at any time, as shown by PGerm. **staþa-* [m./nt.] (Go. *staþa**, OE *steþ ~ stæþ* [m.] 'shore, bank', dial. E *stathe* 'landing-place, wharf', OHG *stado* [m.] 'shore, landing-place', G *Gestade* [nt.] 'id.', dial. Nw. *stad* 'riverbank', dial. Dan. *stad* 'harbour', etc.). Given its obvious origin from the PIE root **steh₂-* 'to stand', the semantic shift was 'standing' → 'place where boats are standing' → 'wharf, harbour' (cp. Gk. ναύσταθμος [m.] ~ ναύσταθμον [nt.] 'port, anchorage') and 'bank, shore'.

136 *LIPP* 422–8. The particle **ko-* in this compound is of great antiquity and cannot be directly compared to the PGerm. perfectivizing preverb **ga-* < PIE **ko-* which is originally found at the end of the clitic chain in verbs, and thus is Vernerized. An example of the particle **ko* in compound that did not became PGerm. **ga-* could be (tentatively) found in a Late PIE word for 'heap'. The resemblance of the root **h₂u̯ep-* of Hitt. *ḫūppa-* [c.] 'heap' (related to *ḫuu̯app-ⁱ* / *ḫupp-* 'to throw, hurl', Lyc. *xupa-* [c.] 'tomb, grave', with the pseudo-root **keh₂₍ₓ₎up-* (for this reconstruction, see Kroonen, 2013: 217; Derksen, 2015: 233; **keh₂up-* in Derksen, 2008: 256) invites to detect a relationship between both: from **h₂u̯ep-* was built a prepositional compound **ko-h₂up-ó-* 'thrown together (so as to form a heap)' (> PSl. **kupъ* [m.] 'heap, mound', cf. Derksen, 2008: 256) → **kuh₂p-éh₂* (> Lith. *kūpà* [f.] 'pile, bunch', not well attested), also **ko-h₂up-éh₂* (> Lith. *káupa* [f.] 'heap', SCr. *kȕpa* [f.] 'hill') → **ko-h₂up-h₂-ó-* (> Av. *kaofa-* 'mountain', Pers. *kōh*, etc.; of the type **rot-éh₂* 'wheel' (Lat. *rota* [f.]) → **rot-h₂-ó-* 'having wheels' in PIIr. **ratHá-* 'cart, wagon, wain'); PGerm. **xaupaz* [m.] 'heap, pile' (OE *hēap*, OHG *houf*, OS *hōp*, etc.) and OIr. *cúan* 'pile' require a parallel etymon **ko-h₂up-n-ó-* 'gathered in a heap' (with the effect of Kluge's law in Germanic, see Lühr, 1988; Kroonen, 2011) which could be projected back to a locative **ko-h₂up-én* 'in a pile, aheap, piled up'.

137 Of the type Gk. ἐπίτεξ 'close to give birth', Ved. *vi-bhā́-* [adj.] 'shining widely' (< PIE **h₁u̯i-bʰéh₂-*), *upānáh-* [subst.] 'shoe' (< PIE **upo-hₓnédʰ-*), etc.

138 Like **u̯óiḱ-s*/**u̯iḱ-és* 'village' or, on another root noun type, **dṓm*/**dém-s* 'house' → **dm-és* [av. *nəmō*] ~ **dm̥-és* [arm. *tan*]), cf. Schindler (1975: 32).

139 Morphologically of the type PIE **u̯r̥dʰ-éh₂* 'set of utterances in a discourse' (Lat. *uerba* [nt.pl.] 'words', *uerba facere* 'make a speech') → back-formation Quasi-PIE **u̯r̥dʰ-ó-m* > PGerm. **wurđą* 'word'.

MLG –, compared to ‘sea’ and ‘high sea’ in Scandinavian, indicate that PGerm. **xaƀą* was perhaps used first for an ‘area (of shallow water) between the coast and the high sea’ (as sometimes Fr. *côte*), where are found conformations like shoals of sand as sandbars and sandbanks, thus lagoons or spits, but also shoals of rock like rocky reefs, shallows or skerries, areas that are particularly impeding and dangerous for navigation, which could explain (at least partially) the semantic extension to the high sea in Scandinavian, valuable for fishing. However, the proposed derivation is uncertain: the word could be recent, and then it rather reflects dial. PIE / Pre-PGerm. (**kăp-ā́* ‘set of banks’ >) **kăp-ó-m*, derived from the weak stem Pre-PGerm. **kăp-*.

6.3.6.b. All the other forms are nasal-stems which cannot be reduced to one proto-form: as nasal-stems are among the most productive derivational categories in both Celtic and Germanic, all could be recent and independent formations originating from the Late dialectal PIE root noun **kōp-s* / **kăp-é/ós*. In Pre-Proto-Celtic, the weak stem **kăp-* was the source of an adjective **kap-nó-* ‘riparian’ (anachronistically **kh₂p-nó-*) which became substantivized (it cannot be determined when this happened), yielding PCelt. **kawno-* regularly. In Pre-Proto-Germanic, the weak stem **kăp-* received a complex suffix **-on-ā* which behaves as a collective, thus Pre-PGerm. **kap-on-ā* (anachronistically **kh₂p-on-eh₂*) ‘set of (landing) places (for boats) on a shore’ or ‘shore/jetty for landing several boats’.[140] From the strong stem **kōp-* is formed PGerm. **xōpą* (< **xōppą*), which, in view of its **p* compared to PIE **p*, implies that it suffered the effects of Kluge’s law[141] and thus could mechanically descend from **koh₂p-nó-m*, but it could rather be a recent derivative Pre-PGerm. **kōp-nó-m* (perhaps a singulative on an underlying collective **kōp-nā́*) built before the effects of Kluge’s law.

6.4. PIE **sm̥-h₂ep-*

The last compound we will posit is reflected by PGerm. **sumpaz* ‘swamp, marsh, bog’ (ME *sompe* ‘marsh, morass’, Eng. *sump* ‘cesspool, cesspit’, Du. *zomp*, Gm. *Sumpf* ‘swamp, marsh’, etc.), without clear external comparanda. It has often been linked to **swamƀ/pᵖan-* ~ **swamma-* ‘sponge, mushroom’[142] because of the fact that the soil of a swamp, wholly soggy and soaked, can be very easily pressed (or treaded by the feet) and is therefore squishy and squeezable like

140 As a parallel, one can cite PGerm. **axanō-* ~ **aganō-* [f.] ‘awns, chaff’ (Got. *ahana*, ON ǫgn ‘chaff’, OHG *agana*, OE *ægnan* ‘awn, chaff’), obviously related to Lat. *agna* [f.] ‘ear of grain’ (< Plt. **akonā*) < Late PIE **h₂ek̂-on-eh₂*; semantically, the suffix **-eh₂* provides a clear collective meaning, as an ear of grain has several awns. PCelt. **agronā* ‘berries, sloes’ (W *aeron* ‘fruits; berries’) has a clear collective meaning as well, while the related PGerm. **akraną* ‘tree fruit, acorn’ is probably a secondary singulative; the etymon PCelt. **agranyo-* (supported by Cat. *aranyò* ‘sloe’, Sp. *arañòn* ‘blackthorn’, Occ. *agreno* ~ *aranhon* ~ *a(g)ragnou* ‘sloe’, etc. and the probable Basque loanword *aran* ‘plum’) indicates an alternating *n*-stem.

141 See fn. 136 for references.

142 Go. *swamm* ‘sponge’, OHG *swamp* ‘mushroom’, *swam* ‘sponge’, ON *svǫppr* ‘sponge, ball’, etc.; zero-grade in Icel. *soppur* ‘ball, float of a net’, Far. *soppur* ‘tuft, fungus’, etc. The meaning ‘mushroom, fungus’ seen in some reflexes probably arose because of some mushroom species that structurally (and sometimes texturally) are like sponges. One can think of some of the genus *Sparassis* (the ‘cauliflower mushroom’) or *Morchella* (the morel, or ‘sponge mushroom’), two very common geni in the European forests. It was first a particular myconym that became the hyperonym, a frequent phenomenon (cp. E *mushroom* < Fr. *mousseron* ‘St. George’s mushroom, *Calocybe gambosa*’). This set is sometimes linked to Gk. σομφός ‘spongy, porous’, a very speculative and difficult etymology: Gk. σ- is not the regular outcome of PIE **sm̥-* (one expects PGk. **hwompʰos* > Gk. †ϝομφός). Kroonen (2011: 225; 2013: 495) relates also **swamƀ/pᵖan-* to the ‘substratic’ word set comprising Lat. *fungus* m. ‘mushroom’, Gk. σπόγγος, σφόγγος m. ‘sponge’, Arm. *sunkn* ‘mushroom, tree fungus’, adding OCS *gǫba* ‘mushroom’; the whole relationship is unconvincing in many aspects, but it is not the place to discuss this topic.

a sponge, and because of forms like E *swamp* 'marsh, wetland' and ME *swam* 'swamp, bog, muddy pool, etc.' and 'mushroom, sponge'.[143]

6.4.1. Spongy ponds?

Only these two words justifies this connection. Kroonen[144] explains Eng. *swamp* as the trace of an ablauting form **swamp^{p}-* of **sump-*, but this variant is absent from other Germanic languages,[145] and, moreover, *swamp* is not attested at an early date enough (1624, in John Smith's *Generall Historie of Virginia, New-England, and the Summer Isles*) to be necessarily that old; it could rather come from a dialectal blending of ME *sompe* and ME *swam*. *Swam* itself is semantically isolated: it is the only word in this set that got both meanings, and other Germanic languages distinguishes them well and never collapse them. Thereby, *swam* represents perhaps also two words blended together in, the first from PGerm. **swamma-* 'mushroom' above, the second from an ablauting form of the verb *swimmen* 'to swim' if it was used in a broader meaning range '*barboter*, *patauger*, to splash, walk in water, wade through muddy water' (not so far from the Faroese frequentative *svam(b)la* 'to splash around water, bathe'); *swam* would be a kind of *pataugeoire*.

6.4.2. A new proposal

We propose to reconstruct an archaic compound **sm̥-h₂p-* 'with the waters together' ~ 'confluence' > 'flooded area, marshy place, wetland, soil saturated with water' with the preverb **sm̥-* 'together, with'. This is formally parallel to Ved. *samudrá-* 'ocean' < '(receptacle of) waters (collected) together', and to the toponym *Simbrŭuĭum*, name of a lake in the Latium formed by the Anio, at the Aequi territory < PIt. **səm-srou̯-iu̯o-m* 'confluence, *cōnfluuium*'.[146] PGerm. **sumpaz*, in view of its **p* compared to PIE **p*, reflects therefore a form with Kluge's law: it represents regularly (Late) PIE **sm̥-h₂p-n-ó-*, which could have arisen from an old locative **sm̥-h₂p-én* 'in the confluence'.

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143 If these words are related, it is difficult to define the directionality of the semantic change that could link 'swamp' and 'mushroom, sponge':
(i) Which one would be primary? Kroonen (2011: 225) does not specify it, but seems to implicitly admit that 'swamp' secondarily arose from 'mushroom, sponge'; however nothing precludes positing the reverse.
(ii) In that case, were the mushrooms named because (at least for some species) of their spongy and soaky texture like that of the swamp soil, or rather was it a specific myconym for mushroom species growing in swampy environments? The second hypothesis seems interesting, because not all the species have the described texture: numerous species (especially when the specimen is fresh) are not spongy or squishy, but rather firm, and sometimes almost hard; examples of a mushroom species growing near rivers, swamps or in periodically flooded areas, particularly under willows or alders, or even in moss, are *Cortinarius uliginosus* (Fr. *cortinaire des marais*), *Xerocomellus ripariellus* (Fr. *bolet des rives*), *Agrocybe elatella* (Fr. *agrocybe des marais*), etc. The first hypothesis, however, can work as well, but only taking into consideration that this texture is not an inherent feature of all the mushrooms: they can become spongy or squishy when they grow too big or rotten, when they are washed in water (as they soak the water up), or simply when they are cooked.

144 Kroonen (2011: 225).

145 Du. *swamp* ~ *zwamp* 'creek, fen, swamp', used in Suriname but not in the Netherlands, seems borrowed to English.

146 Garnier (2016: 45), based on von Planta (1, 173; 2, 456) and Brugmann (1897: 763).

6.5. Recapitulation

To sum up the hypotheses above:

***h₂e**-h₂p-ér*	‘**towards** the water’		
***u̯e/o**-h₂p-ó-*	‘**away from** water’	→	‘bank, shore, etc.’
***ko**-h₂ép-*	‘**in contact with** water’		
***sm̥**-h₂p-ó-/-én-*	‘**with** the water **together**’ ~ ‘**con**fluence’	→	‘flooded area, wetland’

7. Conclusion

In the preceding lines, we have illustrated the importance of a single lexeme like the root noun **h₂óp-/*h₂ép-* ‘stream, running water, river’ in the formation of new words: watery places at the borders of streams such as wetlands or shores; things produced in the moving water like froth, foam; metaphorical characteristics of a waterrun, such as abundance or swiftness. These examples thus allow to once again underlining the importance of derivational categories like decasuative derivation, as well as prepositional compounds, which look archaic and show an unsuspected richness and variety. This demonstrates, through all available morphological strategies, the ability of the Indo-Europeans to represent through language the complexity of their environment and the complexity of their conception of it.

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